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ABSTRACT

Background papers for the California Postsecondary Education Commission's five-year plan (1982-87) are presented. The first paper, "Planning for the Eighties," discusses the need for planning, delineates the essential elements of planning, describes the segmental and statewide planning processes in California, and notes existing barriers to more effective planning. Financial issues, including the most current information available on sources of funds for California colleges and universities, the role of the state in financing postsecondary education, and issues regarding this role that pose problems for the future, are addressed. A discussion of students summarizes trends in student needs and characteristics and raises questions about institutional obligations and policies toward students in light of these trends. In regard to faculty, four topics are considered: collective bargaining; affirmative action; the role of part-time faculty; and faculty mobility, development, and retirement. The fifth paper reviews the major problems likely to confront California's colleges and universities over the next five years, including economic factors (such as state funding), demographic influences (such as the decline in the college-age population), and socio-political concerns. External environmental forces affecting postsecondary education in the state include: an aging population, a majority of minorities, inadequate preparation for college, continued inflation, and increasing energy costs. Internal environmental factors include: enrollment-derived funding formulas, tenure, collective bargaining, the new student clientele, and centralization of authority. A bibliography is appended. (Author/SW)

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THE CHALLENGES AHEAD

ISSUES IN PLANNING FOR CALIFORNIA POSTSECONDARY EDUCATION 1982-1987

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
1020 TWELFTH STREET, SACRAMENTO, CALIFORNIA 95814

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Commission Report 81-26

November 1981

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This report is a companion document to The Challenges Ahead: A Planning Agenda for California Postsecondary Education, 1982-1987 -- a five-year plan issued by the California Postsecondary Education Commission in November 1981 and available without charge from the Commission.

The Commission was created by the Legislature and the Governor in 1974 as the successor to the California Coordinating Council for Higher Education in order to coordinate and plan for education in California beyond the high school. As a state agency, the Commission is responsible for assuring that the State's resources for postsecondary education are utilized effectively and efficiently; for promoting diversity, innovation, and responsiveness to the needs of students and society; and for advising the Legislature and the Governor on statewide educational policy and funding.

The Commission consists of 15 members. Nine represent the general public, with three each appointed by the Speaker of the Assembly, the Senate Rules Committee, and the Governor. The other six represent the major educational systems of the State.

The Commission holds regular public meetings throughout the year at which it takes action on staff studies and adopts positions on legislative proposals affecting postsecondary education. Further information about the Commission, its meetings, its staff, and its other publications may be obtained from the Commission offices at 1020 Twelfth Street, Sacramento, California 95814; telephone (916) 445-7933.

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PREFACE

This set of staff papers supplements and provides background for the Commission's 1982-1987 five-year plan, The Challenges Ahead: A Planning Agenda for California Postsecondary Education, 1982-1987. As noted in that report, the primary responsibility for State-level planning for all of postsecondary education in California rests with the Commission. From its creation in 1974, the Commission has been charged by the Legislature to "prepare a five-year plan for postsecondary education which shall integrate the planning efforts of the public segments and other pertinent plans" and to "update the state plan annually" (Education Code, Section 66903).

The Commission's first five-year plan, issued in December 1975, set forth assumptions about the future of California postsecondary education, projected enrollments and expenditures, enunciated State goals, identified priority problems for 1976 and the following five years, and proposed plans of action for dealing with each of these issues. As the Plan itself stated, it was "problem oriented, with the priorities set in terms of those major problems that face the State of California during the last half of the decade of the seventies" (California Postsecondary Education Commission, 1975, Preface). Successive updates of that plan analyzed the extent to which these problems were being resolved and articulated new issues facing postsecondary education as well as the steps to be taken to address them.

In the spring of 1979, the Commission embarked on the development of a five-year plan for the first half of the 1980s. Rather than unilaterally identifying issues to be addressed in the planning document, members of the Commission staff began extensive consultations to identify the major areas of concern to the postsecondary system as a whole. Officials of each segment were asked to provide a list of the most serious problems their system would face in the '80s. Commissioners were queried for their own lists of concerns, as were the Commission's Student Advisory Committee and other interested groups. Commission staff talked with the staffs of the Department of Finance and of the Legislature about their concerns and expectations for postsecondary education in the '80s. Finally, with the issues and uncertainties narrowed, the staff prepared a series of planning papers under five broad headings: (1) an overview of California postsecondary education; (2) the environment for California postsecondary education; (3) student needs and characteristics; (4) faculty issues and concerns; and (5) State and

segmental planning. These papers, published in July 1980 as Issues in Planning for the Eighties, were intended to generate discussion and debate about the issues, the uncertainties, and the alternatives facing the California segments and the system as a whole. While the issues they discussed are not the only ones likely to be of concern during the 1980s, they were the ones which emanated from this consultative planning process.

Since then, several of those papers have been rewritten and expanded, and one new paper--on financial issues--has been written, following adoption of the State's 1982 budget. This present document contains five of these papers.

The first paper, "Planning for the Eighties," discusses the need for planning, delineates the essential elements of planning, describes the segmental and statewide planning processes in California, and notes existing barriers to more effective planning.

The second, on financial issues, includes the most current information available on sources of funds for California colleges and universities, the role of the State in financing postsecondary education, and issues regarding this role that pose problems for the future.

The third, on students, summarizes trends in student needs and characteristics and raises questions about institutional obligations and policies toward students in light of these trends.

The fourth, on faculty, identifies four primary topics requiring attention: collective bargaining, affirmative action, the role of part-time faculty, and faculty mobility, development, and retirement.

The fifth and final paper reviews the major problems likely to confront California's colleges and universities over the next five years, whether economic (such as State funding), demographic (such as the decline in the college-age population), or socio-political, both as a summary of the challenges identified in this volume and as introduction to the Commission's recommendations regarding goals and priorities in the companion volume.

I share the Commission's appreciation for the work of the many members of the staff, particularly that of Janis Cox Coffey, Dorothy M. Knoell, and William H. Pickens, in preparing this volume.

Patrick M. Callan
Director

PLANNING FOR THE EIGHTIES

INTRODUCTION: THE NEED FOR PLANNING

Planning is a process by which an educational institution or system attempts to anticipate the effects of future events upon its ongoing operations and activities. For most of the post-World War II period, the quantitative problems of growth--expansion, new students, new campuses, and new programs--absorbed the energies of educational planners. The major concern was how to accommodate the rapidly expanding numbers of young people who wished to participate in post-secondary education. While facilities planning, financial planning, and academic planning were often carried out independently of one another, by the late 1950s, the pressing need to design new academic programs and construct new facilities to accommodate the influx of students gave new impetus to the idea of coordinated institutional planning. Yet, as Jack Freeman has stated, "the combination of easy money and burgeoning enrollments provided little incentive to planners and administrators for prudent management of resources, or for careful, integrated academic, physical, and financial planning with a view to the long-term consequences of growth" (1977, pp. 35-36).

Today, the major issues facing postsecondary education include how to plan for decline rather than growth; how to anticipate the effects of fiscal constraints and government spending limitations; how to respond to the needs of a new and perhaps underprepared student clientele; and how to add new faculty, continue with program innovations, and increase program vitality, while at the same time reducing costs and increasing accountability. The prospect is one of reallocating existing resources among competing priorities through better planning, rather than through allocation of new funds.

Planning, then, is undoubtedly more necessary now during this period of limited resources and institutional retrenchment, than it was during the period of rapid growth and expansion. Many critics of the educational planning process have cited the need for more effective planning at the institutional and systemwide levels, as well as at the statewide level. Freeman argues, "We must be about the business of restructuring our academic programs and institutions if we are to deal effectively with increasingly severe limitations on resources while attempting to meet the educational needs of a changing society"

(1977, p. 34). Others, such as Frank Bowen and Lyman Glenny, have argued that the continuation of substantial institutional autonomy "may well depend on rigorous and effective planning and program review procedures," since only such procedures and the "implementation of decisions reached through them can provide assurances to external constituencies that freedom is being well exercised" (1980, p. 55). Perhaps Kenneth Boulding has issued the clearest warning concerning the need for better planning: "In a growing institution, mistakes are easily corrected; in a declining institution, they are not" (1975, p. 8).

While these concerns for responsiveness to student and societal needs, for institutional survival and autonomy, and for intelligent decisions during retrenchment, are clear enough evidence of the need for planning, a further argument can be made concerning planning and educational quality. While in the past, planning was largely concerned with growth, with accommodating increasing numbers of students into postsecondary education, educational planners can now devote more attention to the qualitative dimensions of a relatively stable system. Although resource limitations make the easy option of augmenting resources to improve program and institutional quality unlikely, such limitations can encourage educational planners to be more innovative in refining the educational system, and in attempting to make the system more effective and more responsive to the needs of the new student clientele and of the society which must support the system. A smaller system may also be a higher-quality system, and planners need to begin to determine means of defining and measuring quality in both programs and institutions. The maintenance and enhancement of a quality system of postsecondary education is perhaps the most important reason for more effective planning in the 1980s. John D. Millett has stated that "planning is more the ability to cope with change than it is the power to foresee change" (1979, p. 4). Developing this ability through improved planning processes and procedures can help ensure not only the health but the excellence of California's postsecondary education system during the 1980s.

ESSENTIAL ELEMENTS IN PLANNING PROCESSES

Variation in Types of Planning Processes

Higher education in the United States has been characterized by a tremendous diversity of types of institutions and programs, so it comes as no surprise that the management styles and planning processes in use at various times around the country have been equally diverse. However, with the advent of shrinking enrollments and resources, certain common themes began to emerge in educational

planning, themes or concepts often borrowed from the business world. Institutions began to be concerned about their "clientele," and about how to maintain or increase their share of the student "market." Institutions began to carefully redefine what segment of the market was theirs, and to consider how to identify those in the market who could benefit most from their services. Then institutions borrowed ideas from the advertising world and began to notify potential clients or students about how the particular institution could meet their wants, needs, and concerns. The educational community began to recognize that a close relationship exists between the institutional mission, its market, and fiscal stability (Brantley, Miller, and McAlpine, 1979, pp. 18-25).

As the concern about resource availability began to mandate some type of coherent, comprehensive institutional planning, many institutions again turned to business, or government, in an attempt to use the newest concepts of business management to help in institutional management. There have been many variations in educational management systems, but a large number of them derived from the federal government's Program Planning and Budgeting System (PPBS), a system based essentially on the concept of "Management by Objectives" (MBO). A number of institutions (including the University of California) tried the PPBS system with mixed results and ultimate disenchantment. While PPBS may have been too highly centralized and structured to fit smoothly into an educational setting, it did illustrate the concept and necessity of tying program planning to the institution's budgeting process.

More recently, a system called Planning, Management, and Evaluation (PME) was developed as a concept by the Institute for Services to Education under a grant from the U.S. Office of Education. Defined as "an established set of procedures for producing a host of primary facts about the activities, costs, and revenues of an institution" (Nwagbaraocha, 1979, p. 32), the PME system is designed to focus the attention of top administrators on basic policy questions, to help them analyze those policies' long-range implications for planning and budgeting, and to ultimately resolve the various issues, including developing priorities for resource allocation. The three elements of the PME system--Planning, Managing (operating), and Evaluating--are designed to provide information ("feedback") to institutional administrators in a closed-loop process.

In addition, a number of institutions have turned to their own institutional research units to provide the necessary coherence in the planning process. Institutional research specialists are being called upon to undertake self-study regarding institutional flaws, weaknesses, and effectiveness; analyze data for trends that may affect future institutional stability; and provide information necessary for institutional decision making. Those who advocate the

use of institutional research in this way to guide the planning process argue that institutional research has the capability to enhance the establishment of a clear-cut institutional mission statement, to analyze market potential, to provide the institutional self-knowledge essential to long-range planning, and to facilitate decision making by the institution's leadership (Brantley, Miller, and McAlpine, 1979, pp. 22-23).

Whatever the process, it is clear that institutions of postsecondary education are becoming increasingly concerned about planning and are attempting to implement comprehensive planning processes. In 1976, the University of Pittsburgh conducted a survey of the 56 largest research universities in the country to determine which had developed comprehensive planning systems. Of the 32 institutions which responded, 23 had developed or were in the process of developing comprehensive planning systems (Freeman, 1977, p. 40). By now, many more institutions have evidence of the need to improve their planning processes, and the next section of this paper examines some of the common elements that appear to be essential to a good institutional planning process.

Essential Elements in Institutional Planning

In the literature of institutional planning and in the planning processes actually used in educational institutions, a particular group of elements appear again and again as essential to good institutional planning.

Leadership: First, effective planning requires strong executive leadership and commitment. Forceful leadership involves mobilizing the campus for action; establishing a pervasive tone for the institution; ensuring that there is a systematic flow of the information necessary for institutional self-knowledge; developing specific strategies for dealing with retrenchment; and working with all parts of the institution to ensure that implementation occurs as planned (Brantley, Miller, and McAlpine, 1979, p. 11-27).

Examination of Assumptions: Second, effective planning requires that underlying assumptions be examined. This includes assumptions about the future, about the environment (including both economic and demographic factors) about the availability of resources (including money, students, faculty, and facilities), and about the nature of the institution itself. If there is any one major shortcoming in institutional planning, it is the failure to deal with the underlying assumptions of a plan. These assumptions should be debated and discussed at the beginning of the planning process, and those which are finally accepted should be made explicit (Callan, 1974; Gerth, 1979).

Clear Mission and Goals: Third, effective planning requires a clear definition of the mission and goals of the institution. A clear definition of institutional mission must be based not only on the needs, requirements, and staff capability of the institution, but also on the service the institution can provide to the public. The mission statement should guide the planning priorities of the institution, by answering such questions as: What is our purpose? Whom should we serve? How well are we doing the tasks we elected to do? What new things should we be doing? What should we not be doing? What things can we do better? What kinds of programs should we be offering? Which of society's needs over the next few years can we help address? Does our institution make a difference? Once the mission statement is established, the institution must adopt a clearly defined set of goals, not the general goals of the past--"provide quality education," "meet student needs"--but goals with operational meaning and measurable objectives (Mortimer and Tierney, 1979).

Broad Participation and Adequate Resources: Fourth, effective planning requires that the process be broadly participatory, that it effectively coordinate all units and departments, and that it have sufficient financial resources to get the job done. All of the institution's or system's constituencies must be involved: trustees, administrators, students, faculty, and even members of the community at large. Such broad participation will create credibility and support for the plan that finally emerges. In order to provide for such broad participation, to enable members of the campus community to participate, and to ensure the coordination of all units and departments, the institution must be willing to make the substantial financial commitment that good planning requires. Planning takes time, and thus it takes money, but it should be money well spent considering the ultimate benefits of a better-managed institution that has the capability of reallocating resources and even saving monies that can then be allocated to new, high priority programs (Freeman, 1977).

Continuity and Comprehensiveness: Fifth, effective planning must be continuous planning, comprehensive planning that links academic and fiscal concerns through clearly defined procedures. Given a rapidly changing environment, most planners now see the need for continuous planning as opposed to the notion of a master plan that will last for five or ten years. Continuous planning allows an institution to consider its various planning options and alternatives in the light of changing conditions (Millard, 1979). Such a continuous planning process should include both strategic planning, based on five- to ten-year projections and goals, and the continuing tactical planning that can respond to short-term changes in situations while moving toward the long-range goals (Mortimer and McConnell, 1978). In addition to being continuous, planning must be comprehensive. To be

effective, planning must be related integrally to budget development and program review, for these are the primary instruments of planning implementation. Planning should provide the guidelines within which budget development takes place, and the rationale for review of new and existing programs (Education Commission of the States, 1979).

Effective Program Review: Sixth, effective planning requires an effective program review process; in fact, program review is often considered the key to the planning and resource-allocation processes. While program review in the past was directed at determining the need for new programs, institutions now need to examine the justification for continuing existing programs as well. Programs must be justified in terms of the needs and interests of the society which is being asked to support them, not in terms of the aspirations for status or prestige of the institution's faculty or administration. The institution or system must ask the question of whether the programs which it offers represent the best use of increasingly scarce public resources (Callan, 1979).

In a 1975 study, Lee and Bowen found that institutional and systemwide review of new academic programs had become more intensive and increasingly based on academic quality and campus mission, as well as on fiscal criteria. They found that more institutions were looking seriously at academic program review as a mechanism for making assessments about institutional vitality. In addition, a number of methods had been designed for determining priorities among academic programs, with the implication that programs not of high priority would be subject to termination. There is general agreement in the literature that developing visible and agreed upon criteria which can be applied in evaluating, modifying, or terminating programs is extremely important. Beside deciding what criteria are appropriate in establishing program priorities, the institution or system must decide what relative weight should be given to each criterion. Mortimer and McConnell outline a program review decision making process with six elements: (1) there must be early consultation about both the process and the criteria; (2) procedures should be formulated jointly by faculty and administration; (3) there must be adequate time to conduct reviews; (4) information must be available to all involved with the review; (5) there should be adequate feedback concerning the results of the review; and (6) any decision reached should be communicated widely (1978). To be effective, program review must examine more than the factors of student need or desire and program cost; it must also examine program quality. The development by the institution or system of measurable indices of quality is crucial to the program review process.

Performance Review: Finally, effective planning requires a means for evaluating the performance of the institution or system as a whole. Such an evaluation process should consider whether programs

are meeting their objectives at reasonable cost; should include a means for determining the relative priority of programs with respect to resource allocation; and should provide for an evaluation of the planning process itself at regular intervals, to ensure that it is continuing to meet the needs of the institution or system. The evaluation process should gather the implementation data and compare actual performance with planned performance; it should include an assessment of goal and objective attainment as well as of resource utilization; and the results of this evaluation process should be used as information for the next planning cycle (Freeman, 1977; Nwagbaraocha, 1979).

Essential Elements in Systemwide Planning

These seven major elements that are essential components of successful institutional planning, are also essential to effective planning at the systemwide level for multicampus institutions. In their book, Managing Multicampus Systems: Effective Administration in an Unsteady State (1975), Lee and Bowen indicate that the greater diversity and flexibility of multicampus systems can mitigate some of the pressures of the current "unsteady state." With respect to academic plans and planning procedures, the authors report that such plans have become working documents for the systems, based on realistic demographic and fiscal projections, and that such plans now are often more integrally related to the budget and to the program review process. Reviews of existing, as well as new, programs are now a permanent feature of multicampus system governance. Improved central information systems that provide comparable data for similar programs throughout the system are used to assist in making decisions regarding the reallocation of resources from existing programs to support new program development. Both campus and systemwide administrations are involved in this increased program review, and "the clearly emerging system role is to require campus program reviews, either under system guidelines or under campus guidelines which the system approves" (p. 136).

Need for Fiscal Flexibility: While program review and budgeting procedures are now being coordinated much more closely in multicampus systems, the budget, especially for publicly supported systems, is also linked to enrollment fluctuations through various formulas. Although these budget formulas have provided the additional flexibility needed in times of growth, strict adherence to such formulas in face of enrollment declines may actually reduce the flexibility so necessary to multicampus systems in a period of fiscal constraints. Time is needed to adjust to enrollment shifts or losses, and the systemwide administrations must have the ability to reallocate resources among campuses and programs to meet student needs and demands. "It is essential, therefore," state Lee and

Bowen, "that responsibility for meeting state fiscal objectives be imposed upon multicampus systems as systems. Economies, where they must be achieved, should generally be accomplished by reallocation within and by the system itself" (p. 138). The introduction of faculty collective bargaining into multicampus systems, however, may limit the amount of fiscal flexibility a system can maintain.

Both the dramatically increased importance of budgeting in the planning processes of multicampus systems, and the present climate of fiscal conservatism, have increased the likelihood of legislative intrusion into areas that traditionally have been within the purview of campus or systemwide administrations. More and more frequently, the budget process is being used by state legislatures to make policy changes and impose specific programmatic mandates. Lee and Bowen stress that there is "a need to define more explicitly the boundary between legitimate State fiscal concerns and the education perogatives of multicampus systems. . .. Budget control language should not be used to mandate a particular organizational structure or staffing pattern within the multicampus system" (pp. 138-139).

Need for Diversity: Beyond the difficulties of academic planning, program review and budgeting, multicampus systems also face the problem of maintaining or increasing diversity among their campuses. During the growth era, most new campuses in a system sought to develop the same scope and types of programs offered on the senior campus. Now, however. multicampus systems are discovering that diversity among campuses in terms of program offerings, curricular emphasis, and delivery systems, can often serve as a cushion against the fiscal effects of constant shifts in student demands. To again quote Lee and Bowen:

> . . . the raison d'etre for the multicampus system should be to increase the quality of campus programs in the face of tight resources, to attract students by promoting the qualities of diversity, specialization, and cooperation--the defining characteristics of the multicampus system (p. 145).

Centralization vs. Decentralization: Finally, multicampus systems must cope with one problem unique to their structure--that of the appropriate balance between systemwide centralization and campus autonomy. Lee and Bowen describe the problem thusly:

> . . . for the foreseeable future, creative use must be made of the unique organizational structure that combines coordination and governance. Coordination implies a continuing high level of campus autonomy--the perogative of the campuses to promote their own institutional stamp and style. Governance, on the other hand, implies that the

> central administration has direct operational responsibility and is accountable to the State for the sum of activity across campuses. The tension between campus and central responsibility cannot be resolved by abandoning either (p. 148).

The maintenance of an appropriate balance in authority and function between the campus and the systemwide administration may well prove difficult, but success in this endeavor is crucial to the ability of multicampus systems to plan for and effectively manage the particularly uncertain years ahead.

Essential Elements in Statewide Planning

Most states in this country have established statewide agencies to plan for and coordinate the various segments of postsecondary education within the state. These agencies vary in power from advisory bodies to full statewide governing boards, but regardless of their power, several features characterize planning among them.

Articulation of the Public Interest: The planning agencies, standing as they do between the institutions of postsecondary education and the executive and the legislature as representatives of the public, are generally charged with articulating the public interest in and needs for postsecondary education, and with ensuring that those needs are being met. Since each institution and segment of postsecondary education has the tendency to identify its own aspirations and interests with that of the public, the statewide agency's perspective is important, because the public interest may not always coincide with the combined interests of the institutions and segments. The statewide planning agency must ask the significant questions that relate to the public interest: What are the needs for educational services? How can the State's resources best be utilized to meet those needs? How can educational programs be made responsive to public needs rather than to institutional or parochial interests? (Callan, 1974).

Analysis of Trends: The second essential element in effective statewide planning is a clear statement of the future for which the state is planning. This "future statement" should articulate clearly the assumptions underlying the planning and identify those trends which suggest what the future environment for postsecondary education in the state may be like.

Identification of Goals and Objectives: The third element essential to statewide planning involves the identification of clearly defined statewide goals and objectives for postsecondary education. These goals and objectives should guide the various segments and

institutions in developing their own mission and goals statements (Education Commission of the States, 1979). The ultimate goals of statewide planning should include the following: (1) optimal use of all resources; (2) assured diversity of institutions and programs; (3) systematic development and retention of effective educational approaches and delivery systems; (4) maximum student choice within the limited resources available; (5) maintenance of policy options for the future; and (6) identification of and response to future educational and societal needs for education (Callan, 1974).

Broad Participation: The fourth essential element for statewide planning is a broadly participatory process. State-level planning must involve the institutions, the governor, and the legislature in the planning process, so that they can take the necessary actions to implement the planning objectives. In addition, given the overlapping responsibilities now between elementary, secondary, and postsecondary education for vocational and adult education, programs for the handicapped, for remedial education, and teacher training, the state-level agency must assure better coordination between planning for postsecondary education and planning for the K-12 system. The state-level agency must develop credibility with the executive and legislative branches by producing timely and accurate information, and by dealing forthrightly with the difficult questions of resource allocation and educational program priorities. If it does not deal with these questions, the governor and the legislature will make the decisions (Mortimer and McConnell, 1978).

Attention to Independent Institutions: The fifth essential element involves the development of an explicit state policy toward independent institutions. Although the state-level agency is often seen as planning primarily for the public sector of postsecondary education, it must include a clear acknowledgement of the potential impact of the independent sector on public sector plans and vice versa.

Assistance in Institutional Planning: The sixth essential element is that of building upon the strengths of existing institutional planning and aiding the institutions and segments in improving their planning processes. State planning should not lead to increased centralization of management and regulation of institutions. Rather, it should recognize the institutional responsibility for curricular policy and instructional methods, while at the same time ensuring institutional and segmental compliance with broad statewide goals and guidelines, and with such things as affirmative action requirements and standards for effective programs (Education Commission of the States, 1979). The state-level agency should encourage the segments and institutions to define, or redefine, their missions and goals far more explicitly, and to establish educational priorities in instruction, research, and public service.

At the same time, the agency should use incentives to reward innovation and should encourage distinctive missions and differentiation of function within as well as between the segments (Mortimer and McConnell, 1978).

Linking Program Review and Budgeting: Finally, the state-level agency must assure more rigorous segmental review and evaluation of existing and proposed programs and develop procedures to link program review with statewide budget development. Better statewide program review requires an effective information system, and the development of procedures for estimating quality that go beyond the measurement of such outcomes as the number of students completing programs, or the number of credit-hours generated per faculty member. Effective program review should measure institutional and segmental results against their designated missions and specific objectives. Finally, effective program review must be followed by the hard decisions of curtailment, reform, or elimination of programs, as conditions may warrant. Only such difficult decisions will free needed resources that can then be used to enhance other educational offerings, or to establish new programs or innovations in educational services.

As can be seen, there are many elements that are common to effective planning processes at both the institutional and segmental levels as well as at the statewide planning level. To a considerable extent the processes are interdependent, and an improved planning process at one level will help ensure better, more effective planning at all other levels.

SEGMENTAL PLANNING IN CALIFORNIA

Most planning for higher education in California during the past twenty years has been done within the general guidelines of the Donahoe Higher Education Act of 1960, which incorporated a number of the most significant recommendations contained in A Master Plan for Higher Education in California, 1960-1975 (Liaison Committee, 1960). Other recommendations which were not enacted into statute were adopted as policy and implemented by the governing boards of the three segments of higher education: the University of California, the California State University and Colleges, and the California Community Colleges. Although amended several times in the last twenty years, the Donahoe Act today still retains its most significant features: the differentiation of functions among the three public segments and the definition of the eligibility pools from which each segment may draw its students. Within these general confines, the three public segments plan in various ways to attract and accommodate students in a wide variety of educational programs, and each of the public segments has a formal planning process.

In addition to the three public segments, there are other segments or sectors of postsecondary education in California: the independent colleges and universities; the private, proprietary postsecondary institutions; and the public adult and vocational schools administered by the Department of Education. These segments also have planning processes, although they are less likely to be formal and are often concentrated at the institutional level. The planning processes of all these segments of California postsecondary education as described in their documents and in consultations with Commission staff, are summarized below.

Planning in the University of California

Work of the Joint Planning Committee: In January 1979, President Saxon informed the Regents that the University had entered a new and urgent stage in its planning for the future: a stage that would involve both a new systemwide plan and new campus plans. The first step in this process was completed with the publication of a report entitled The University of California--A Multi-Campus System in the 1980s (1979), prepared by the Joint Planning Committee, a body advisory to the President. In this report, the Committee discussed the issues and trends that both the campus and systemwide leaders needed to consider in planning for the 1980s, including the decline in the 18- to 24-year-old population, the increasing ethnicity of the State, a constrained fiscal environment, and the trends toward an older, nontraditional, and part-time student clientele. The report called for "planned diversity and selective excellence" among the campuses--a concept that focused on the development of selective missions and areas of expertise among the campuses. Also discussed were various contingency plans as possible responses to a severe shortage of resources, including the consolidation of programs on a campus or within the system, consolidation of two or more campuses, and even the closing of a campus, although such options were not considered likely. Perhaps most important in the Joint Planning Committee report was the emphasis on the importance of rigorous program review in the 1980s, and the recommendation of the development of a new systemwide program review process, with a mechanism for review of existing and new programs on a comparative, cross-campus and systemwide basis.

The Joint Planning Committee report, discussing as it did some of the more unpleasant possibilities that the University would have to consider in its planning for the future, stirred considerable controversy within the University community. However, in interviews conducted by Commission staff in September 1980, University administrators and the past head of the Academic Senate virtually all agreed that the document had served its purpose of highlighting the new environmental factors of the 1980s and some of the more difficult

issues with which the University must be prepared to cope. In fact, one person indicated that precisely because the report sparked such controversy, people at all levels of the University community became aware of the issues and trends and began to take these factors more seriously.

Development of Universitywide and Campus Planning Statements: In May 1981, the systemwide administration issued the new University of California Planning Statement: General Campus Academic Issues for the Eighties. Given the high level of uncertainty about the future, the University administration felt that a document which would set out a strict plan for the next five years would be inappropriate. The University thus decided to use what one top administrator termed a "loose-leaf binder" approach to planning, with the University Planning Statement as the first entry, followed by the campus academic planning statements. The University Planning Statement establishes broad institutional objectives for the decade of the 1980s, summarizes those planning issues that are already resolved and delineates those still to be resolved in the next few years. It designates the responsibilities of the campuses, the systemwide administration, and the Academic Senate, and provides guidance for meeting the University's planning objectives. The University Planning Statement was developed by the administration's Planning Management Group and was reviewed by campus Chancellors, campus Academic Senate divisions, the Systemwide Academic Senate, and by the Student Body President's Council.

While the development of the University Planning Statement was underway, the campuses were revising their initial planning statements in light of responses by the Academic Program Planning and Review Board and the University Committee on Planning and Budgeting. The campus planning statements are to be completed by Fall 1981.

Once the University Planning Statement and the campus planning statements are completed, in order to focus in detail upon specific issues important to its planning, the University will develop a series of "white papers," which will cover in depth such issues as access, enrollments, research, and the level of preparation of incoming University students. These white papers will also cover any new issues that arise during the five-year period, and will discuss the means to address the issues. With the three components of the University Planning Statement, the campus academic planning statements, and the series of white papers, the University's systemwide planning process is intended to become more open ended and interactive than was the case with previous University plans and planning processes.

Changes in University Program Review: As mentioned earlier, the Joint Planning Committee recommended the development of a new

process for review of existing programs at the systemwide level. The Commission had also recommended the establishment of procedures for systemwide reviews of academic programs in each public segment in its Annual Report on Program Review Activities, 1978-79. During the series of planning interviews with University administrative and faculty representatives conducted by Commission staff in September, there was considerable discussion of the new University procedures for systemwide program review, which were then under review by the Academic Council, the Council of Chancellors, and the President. The new policy and procedures statement on "University Program Reviews" was issued by President Saxon on September 17, 1980. In the past, Universitywide program reviews were initiated by the Academic Planning and Program Review Board, a largely administrative body. The new procedures now require joint sponsorship of Universitywide reviews by the systemwide administration and the Academic Senate, with joint responsibility for monitoring the implementation of the recommendations resulting from the systemwide review. Adoption of these new procedures is seen by the University as a significant step forward in shared governance between the faculty and the administration in the area of review of existing programs.

The new policy and procedure statement indicates that existing procedures for most types of program review are not affected by the document--specifically, those procedures for review of new program proposals, and those for campus-based reviews to monitor program quality and provide the basis for internal resource reallocation. Also unaffected by the new policy statement will be the systemwide policies for transfer, consolidation, disestablishment, and discontinuance of academic programs, which were issued by the President in September 1979. That policy calls upon the campuses to establish local procedures for implementing such recommendations, and almost all the campuses have now submitted their procedures for review by the systemwide administration.

The new policy statement for systemwide program review cites several situations that can cause the initiation of a systemwide program review, including: the need for such a review in support of broad academic planning to evaluate the objectives, goals, or mission of the University in particular areas of scholarship; the need for comparative evaluations of programs on various campuses in order to inform decisions that must be made at the systemwide level; the necessity of reducing the number of programs offered or for intercampus consolidation of programs due to resource constraints; and in the event that it is concluded preliminarily that a program offered on less than all campuses should be offered at additional campuses. The authority to request a systemwide review has been expanded to include a range of persons and University committees, including the President, the University Committee on Educational Policy, the Coordinating Council on Graduate Affairs, the University

Committee on Planning and Budgeting, the Council of Chancellors, or any one Chancellor. The policy also establishes an administrative/faculty committee to evaluate the requests for systemwide program reviews and to advise the President as to which reviews should be undertaken. The responsibility of monitoring the implementation of those recommendations emanating from the systemwide review process is to be shared by the President and the Academic Council or the Senate. The new policy for Universitywide program review has established a mechanism that should provide for more effective systemwide planning and coordination within the University.

Relation of Planning and Program Review to Budgeting: Both the University's new planning process and its new process for systemwide program review will influence the University's budget process. In interviews with University administrators, the concept of the academic planning process leading the budget process was universally supported. Substantive decisions about budget priorities occur as a result of the University's academic planning process. At the systemwide level, there is to be a clear linkage of the budgeting, program review, and planning processes, accomplished largely through the assignment of the persons chiefly responsible for each area to each other's major policy committees. The close working relationship of the planning, program, and budget staff at the systemwide level is carried to the campus level through the mechanism of the "campus consultation team." This team, composed of the chief systemwide administrator in each of the three areas of academic planning, program review and budgeting, visits each campus annually to review the campus' desired program and budget change proposals and to get a sense of the campus' specific program needs and policy problems. The information from the campus visits is then used in formulating both the campus and the systemwide budget. University administrators reported that the more interactive, "loose-leaf" approach to long-range planning, and the new systemwide program review process, will help the University moderate the effects of possible resource constraints or budgetary reductions, by providing procedures through which information on planning priorities and program strengths and weaknesses will be continually available to the systemwide administration for use in its decision-making processes.

Planning in the California State University and Colleges

Planning in the State University system has for many years been based primarily upon academic program planning. Campus academic master plans--five-year projections of new curricula, updated and revised annually--form the basis of campus and systemwide planning for facilities, faculty staffing, and library development. Closely

linked to the academic planning process has been the budget process, since the allocation of full-time equivalent enrollments to each campus is what begins the annual academic planning process.

Work of the Project Team on Academic Programs: In late 1978, as a result of Proposition 13-related budget reductions and in the face of enrollment declines on several campuses, the systemwide administration decided that the changed circumstances confronting California public higher education required revisions in the State University's systemwide academic planning and budgeting processes. Several project teams were established to conduct analyses of major budget areas, make findings, and report back to the Chancellor. Chief among these teams was the Project Team on Academic Programs, a broadly representative group which published its report in May 1979.

Throughout the report of the Project Team on Academic Programs, program review and planning are regarded as the primary mechanisms for maintaining quality, and most of the report's recommendations are directed at enhancing planning through improved program review. Specific recommendations include: development of quality measures for large programs; development of minimum review guidelines and criteria at the system level to ensure that quality levels are being judged from a reasonably uniform perspective; inclusion of program review findings in resource allocation processes; and evaluation of the effectiveness and utility of campus program processes, to be undertaken at the systemwide level. Also recommended was the establishment, by the Chancellor, of a Standing Committee on Academic Planning, with representation of faculty, students, and administration, which would coordinate system program planning and review responsibilities.

In the past year, a number of the recommendations from the Project Team's report have been implemented, including the establishment of a standing systemwide Committee on Academic Planning and Program Review. In addition, in order to ensure that each campus has in place program planning and review procedures designed to cope with fiscal and other emergencies, the Chancellor has been working with the Committee on Academic Planning to see that such appropriate policies and procedures are being developed at the local level.

Since January 1979, a number of policy directives concerning program review have gone from the Chancellor's Office to the campuses. These policy statements also involve the implementation of various Project Team recommendations and include interim policies for the discontinuation of academic programs (January 26, 1979); instructions for revising and updating campus five-year academic plans (January 15, 1980); and clarification of the program discontinuation policy (June 12, 1980).

Interviews with systemwide administrative and faculty representatives conducted by Commission staff in early October 1980, as well as the July 1980 report entitled Academic Program and Resource Planning in the California State University and Colleges, indicate that the new program planning and budgeting procedures are being implemented at both the campus and systemwide levels.

Changes in Mission Statements and Program Review Procedures: At least in part as a response to a February 1980 Commission recommendation that "the segmental offices should work toward identifying certain campuses as centers for specialization and distinction in specified fields of study . . . and (toward) a more precise definition of curricular missions for all campuses in the system, as a first step toward the possible reallocation of resources," the State University reports that steps have been taken to make campus mission statements a more important part of the academic planning process. "Beginning with the 1980 planning cycle, the campuses will be considering and submitting for each projected program a statement on the relation of that program to the individual campus mission . . . . The actual development of more specific understandings and operational mission statements, and their use in program and resource decisions at campus and system levels is a long-term objective" (California State University and Colleges, 1980, pp. 40-41). The consideration of the relation of a proposed new program to the campus' specific mission will now be added to the traditional criteria for review of new programs. Also required now with each new program proposal is a resource analysis that includes a careful assessment of the direct costs of implementing and sustaining the program, the source of the resources to be reallocated, and an assessment of the impact on the area(s) losing resources.

In the area of review of existing programs, the new Academic Program and Resource Planning document cites the need for a close linkage between the academic master planning and resource allocation procedures. Reviews of existing programs, the report notes, can "lead to informed decisions concerning augmentation, maintenance, consolidation or discontinuation of existing programs . . . and can provide a substantive basis to make responsible decisions about resources" (p. 45). The Commission has also stressed the necessary linkage between program review and resource decisions, particularly in the event of contemplated resource losses. Under such circumstances, "a well-established review process promises to provide the best safeguard against arbitrary and indiscriminate programmatic decisions" (California Postsecondary Education Commission, 1980a, p. 8). Systemwide criteria for program review have now been developed, including a statement of the minimal data to be used by each campus in its review of existing programs. While most campuses use additional, more detailed data, the existence of the systemwide data does permit comparisons among similar programs

at various campuses. One of the challenges now facing the campuses, the Academic Program and Resource Planning document states, is "how to act most effectively upon the recommendations stemming from the program evaluations. Several of the campuses are in the process of developing or have already instituted procedures to monitor the implementation of review recommendations" (p. 49).

Relation of Planning to Budgeting: Both the interviews with Chancellor's Office staff and the Academic Program and Resource Planning document underscored the direct relationship of the budget process to the academic planning process in the State University. "The several planning activities of the State University and Colleges (curricular, budgeting, facilities) cannot be accurately described as separate entities since they are inescapably interrelated; changes in the curricular plans have direct consequences with regard to budgets and facilities planning. In like fashion, revisions of facilities plans or budgetary resources have a direct influence on curricular plans" (p. 51). As mentioned earlier, the starting point for the State University's annual planning cycle is the revision of the full-time equivalent (FTE) enrollment allocation for the system and for each campus. These FTE enrollment allocations determine the funds to be available to each campus and provide a basis for the various planning activities, ranging from faculty staffing to long-range capital outlay projections. As one systemwide administrator explained it, "the campus academic plans, plus the FTEs, plus the mode and level (staffing) determinations, drive the budget." As is the case with the University administration, the three persons in the Chancellor's Office who are chiefly responsible for the areas of academic planning, budget planning, and capital outlay planning, meet regularly and serve on each other's policy committees, in order to maintain a high level of interaction within the systemwide administration among the various aspects of the academic planning, program review, and budgeting processes.

In addition to the various new processes and procedures, a new executive planning group has been formed within the Chancellor's Office. This group--which includes the Chancellor, the Executive Vice Chancellor, and the Vice Chancellors augmented by the participation of other staff--has begun a series of dialogues about the State University system, its mission and role in California postsecondary education, and how that role may change over the next twenty years. The group is currently in the process of analyzing existing system planning procedures and identifying areas in which new planning efforts are needed to guide the State University during its second twenty years.

Planning in the California Community Colleges

A variety of planning activities takes place at both the statewide and local levels for the California Community Colleges. In general, the Chancellor's Office reviews college and district plans for new educational programs, facilities, Equal Opportunity Programs and Services (EOPS), handicapped student programs, and occupational education. Serious efforts at comprehensive planning began in 1975, with the development of the Board of Governor's first Five-Year Plan. The Plan was updated in 1977, but due to the passage of Proposition 13, which dramatically altered the way in which Community Colleges were financed, the Chancellor's Office temporarily shelved further updates of the Plan and turned its efforts to more specific, long-term finance planning and the continued development of plans for such specific programs as EOPS, capital outlay, and handicapped-student services.

Development of the Long-Term Finance Plan: During more than a year of study and discussion, the Board of Governors endorsed a series of principles and a Long-Term Finance Plan for the 1980s (Board of Governors, 1979). Some of the principles were incorporated in Assembly Bill 8 (1979) and in more recent legislation.

The Long-Term Finance Plan enunciates certain assumptions that will underlie all future planning for the Community Colleges, including: (1) enrollment growth of approximately 1 percent annually, with most of the growth occurring in colleges in the southern part of the State; (2) differential growth, with 40 districts expected to increase, 10 to be stable, and 20 to decrease in enrollments; (3) a "normal" level of funding, with at least annual inflationary increases; (4) enrollment of more older students, more part-time students, more women and ethnic minorities, and more handicapped students; (5) continued growth in California's population of at least 1.5 percent annually; (6) moderate growth in the State's economy; (7) increased unemployment of baccalaureate degree holders; and (8) continued trends toward increased access, more lifelong learning opportunities, more nontraditional forms of education, and more use of educational media.

The Long-Term Finance Plan also proposes specific planning mechanisms for the Community Colleges in the 1980s. First, the Board of Governors' policy called for the institution of a planning and evaluation process that will enable local districts to demonstrate how they are meeting community needs and statewide interests, provision of a systematic reporting technique, more effective linking of district budget planning with staff hiring and layoffs, and provision of a vehicle for State-level budget decisions. Under the proposed policy, the Board would adopt measurable statewide objectives prior to the development of district plans. Each district

would be required to submit a plan, with annual updates, in order to be eligible for State funding. All district program changes would be reported in their plans, along with district objectives, budgets, and evaluation criteria. The Chancellor's Office would undertake a State-level review of district plans and assist districts by conducting planning workshops. The Chancellor's Office will also seek to coordinate the State and district planning processes with the voluntary accreditation process. An accountability process would be established at the State level to provide for compliance certification and potential audit by the Chancellor's Office. Finally, the Board will set capital outlay priorities on an annual basis and will seek to establish a Community College Capital Outlay Fund.

The Board of Governors cites several reasons for this rather substantial change in the planning process for the Community Colleges. First, the Board feels it must identify the statewide educational interests that districts must reflect in their planning to ensure that statewide as well as local concerns will be addressed. Second, the proposed planning process is intended to ensure district flexibility in resource allocation and in planning and managing facilities, while still ensuring accountability for the use of statewide resources.

A recently approved project funded under the Fund for the Improvement of Postsecondary Education (FIPSE) will attempt to coordinate the State-level planning and accreditation process for Community Colleges. The purpose of this three-year study, to be conducted jointly by the Chancellor's Office and the Accreditation Commission, is to define the respective roles of the Chancellor's Office and the Accreditation Commission in institutional evaluation; develop a planning and evaluation component of the Statewide Information System; conduct workshops to improve institutional evaluation and planning capabilities; develop a plan for coordinated institutional visits by the Chancellor's Office and the Accreditation Commission; and assess the applicability of the model. Positive outcomes of the FIPSE experiment could become operational through administrative code changes.

Changes in Board and Chancellor's Office Functions: In order to move forward with this comprehensive planning process, the Board of Governors instructed the Chancellor's Office staff to make recommendations aimed at improving the governance and functioning of both the Board and the Chancellor's Office. The resulting report, "Integrating and Implementing Policy Decisions," was brought before the Board and adopted in December 1979. This document proposed a series of steps to be taken to improve governance: (1) establishment of measurable statewide objectives; (2) review and redefinition of existing minimum standards (regulations) for the receipt of State

aid need; (3) review of existing Education Code provisions which unnecessarily restrict the use of district resources and the introduction of appropriate legislation; (4) establishment of a process for the submission, review, and approval of district comprehensive plans; and (5) establishment of a process for determining compliance with and ensuring enforcement of minimum standards. The report stated that at the heart of the steps to improve statewide governance is the concept of agency governance on three levels within any given subject matter area: statewide objectives, guidelines, and minimum standards. The first two levels emphasize the leadership role of the Board and Chancellor's Office; the third level emphasizes the compliance or regulatory functions of the Chancellor's Office. The Board of Governors has endorsed the concepts contained in the report, and the Chancellor's Office has assigned the various steps in the process to appropriate staff.

Planning in the Department of Education

Under the direction of the State Superintendent of Public Instruction, the Department of Education is responsible for planning in three areas of postsecondary education: adult education, private postsecondary education, and vocational education.

Adult Education: Adult education is administratively housed within the Department of Education in the Division of Continuing Education. It operates as a postsecondary program in the Adult Education Field Services section which also includes the GED unit and the federal program of Adult Basic Education.

The Department reports that planning for adult education has been greatly affected by the legislative and budgetary adjustments which have been made in the last few years. This impact has been felt at both State and local levels and has prompted a variety of planning activities which have focused upon both immediate and long-range goals for adult education services.

The Department has identified the following assumptions as a base for planning discussions: (1) the full impact of Proposition 13 will begin to be felt, with subsequent limitation of funds for expansion; (2) current economic conditions will not support an open-ended apportionment process and will necessitate setting priorities for use of available funds; (3) public support for programs serving adults will be based on the greatest need; and (4) there will be a need for a common definition of adult education for the major delivery systems.

The State Board of Education, recognizing the increasing importance of adult education planning, has supported several new efforts to

assure that a realistic planning process is being conducted which will include local educational agencies, representatives of other appropriate State agencies, and community-based organizations. This involvement of local planning agencies should assist in identifying statewide needs and future directions for change. A new procedure for program and course approval by the Department is intended to assist in gathering this information to ensure that legislative and policy decisions reflect both local and State needs for specific programs. In addition, the Adult Education Field Services section has been reorganized to improve the consultant and leadership services to local programs while maintaining the office's regulatory functions.

In keeping with the assumptions listed above, the Department expects that there will be a minimum of development in the scope of adult education programs. It does anticipate, however, that the dilemma of increased demand for adult education during a time of limited resources will place heavy demands upon the Department to improve instructional strategies and methodologies, staff development programs, instructional materials, and curriculum development. Constant review and establishment of statewide guidelines, standards, and criteria to improve the quality of adult education services will be the major focus of the Department in the immediate future.

Private Postsecondary Education: Within the Department of Education, the Office of Private Postsecondary Education (OPPE) oversees over 2,500 private postsecondary institutions that offer a variety of educational, professional, technological, or vocational degree and non-degree programs to California citizens. The intent of the Legislature in regulating the private sector, placing that regulation within the Department of Education, and establishing the Council for Private Postsecondary Educational Institutions, an eighteen-member committee advisory to the Superintendent of Public Instruction, is three-fold: (1) to encourage privately supported education; (2) to protect the integrity of degrees and diplomas; and (3) to assure students equal opportunities for equal accomplishment and abilities. OPPE also serves as the State approval agency for veterans' training programs as provided by Title 38, U.S. Code. This activity includes approving educational programs in over 1,400 public and private postsecondary institutions.

The Department lists the following as planning assumptions for the private postsecondary education sector for the 1980s: (1) private postsecondary education institutions are business endeavors: they exist where populations and markets are; (2) as Propositions 13 and 4 impact negatively on the offerings of public education, the private sector will thrive; (3) the private sector has experienced steady growth, with a current enrollment of over 300,000 students--second

only to the Community Colleges--and the trend is for continued growth. The Department noted two planning objectives for the private postsecondary sector. First, that "much could be done to provide basic and reasonable content standards for courses without negating educational innovation and freedom from bureaucratic infringement," and second, that "all the elements of consumer protection need to be subjected to continual scrutiny and consideration to assure that the law and practices of the regulatory agency are appropriate and that rights of institutions and students are assured" (Del Buono, 1979).

Vocational Education: State planning in vocational education is carried out by the Department of Education in compliance with federal statutes which require such plans as a condition of a state's eligibility to receive federal funding. By participating in this federal program, California receives in excess of $50 million of federal funds for vocational education, a sum equal to about 9 percent of all the money expended for vocational education in the State annually.

The Vocational Education Act of 1963, as amended by the Education Amendments of 1976, requires both five-year and annual plans. These plans are developed by the staff of the Department of Education, and reviewed by a joint committee of the State Board of Education and the Board of Governors of the California Community Colleges, as well as by the California Advisory Council on Vocational Education and by the State Planning Committee for Vocational Education, on which the California Postsecondary Education Commission is represented. Final responsibility for the plans lies with the State Board of Education, which has been designated as the responsible agency for vocational education in California.

Much of the content of the vocational education plans focuses on compliance with various federal efforts, rather than on the need for programs in particular occupational fields. These federal efforts involve such targeted groups as the disadvantaged, the handicapped, limited or non-English-speaking persons, displaced homemakers, and women.

Planning by the California Advisory Council on Vocational Education

The California Advisory Council on Vocational Education (CACVE), established by State and federal law, is comprised of 25 members, 19 appointed by the Governor and 6 representing various State agencies concerned with the delivery of vocational education. The planning functions of CACVE include: (1) advising the State Board of Education and the Board of Governors of the California Community Colleges in the development of the Five-Year State Plan for Vocational Education, the Annual Program Plan, and the annual

Accountability Report; (2) conducting periodic and annual assessments of vocational education and making recommendations for improvement to the appropriate State agencies; and (3) advising the State Board of Education, the Board of Governors of the California Community Colleges, the Postsecondary Education Commission, the Joint Policy Council, and the Legislature on policy matters that arise in the administration of vocational education programs. Current priorities of the Council include: serving as a catalyst in the definition and development of a comprehensive policy for vocational education; promoting appropriate services for special populations, such as those with limited-English proficiency, the handicapped, women, minorities, and youth; promoting linkages between vocational education and the private sector; and assessing the effectiveness and resource utilization of statewide vocational education and employment training services.

As CACVE approaches planning for vocational education in the 1980s, the following assumptions will be used: (1) although there is some leveling off of program enrollments in vocational education, due to Proposition 13 and increased high school graduation requirements at the secondary level, the demand for vocational education is still on the increase; (2) an information base needs to be developed in order to support a comprehensive planning process and provide a mechanism for accountability and evaluation; (3) the promotion of appropriate client-related services to special need populations, namely, limited-English proficiency, handicapped, women, minorities, and youth, continues to be a major concern; (4) with the increased demand by business and industry for vocational education programs to train students with current job market skills, expanded use of private sector linkages, such as community classroom experiences, will need to be emphasized.

Planning for California's Independent Colleges and Universities

California's independent colleges and universities, some 250 institutions, do not, of course, have a systemwide planning structure. Existing and functioning independently, they also plan independently. In the past few years, however, the Commission has sought to include this major segment of California postsecondary education in its planning process through the representation of the Association of Independent California Colleges and Universities (AICCU) on various Commission planning committees.

During 1979, the AICCU initiated a comprehensive study of the enrollment and program plans of its member institutions. The purpose of the Study of Enrollment Projections, funded by a grant from the Ford Foundation, was two-fold: to provide useful information to the colleges themselves, and to strengthen participation of the indepen-

dent segment in State-level planning for higher education. The AICCU advises that the final summary report of the study "will provide a comprehensive look at the plans and expectations of California's independent colleges and universities in the early part of the 1980's. By supplying this information to the California Postsecondary Education Commission, we will help to assure that the contributions and concerns of the independent segment are taken into account in the Commission's recommendations concerning state higher education policy" (Thelin, 1979).

STATE-LEVEL PLANNING

Enrollment Planning

Enrollment projections in California represent the essential foundation for annual current expense and capital outlay budgets, facilities planning, academic planning, personnel recruitment, admissions policies, and nearly every other facet in the management and administration of higher education. Projected enrollments, in terms either of average daily attendance (ADA), full-time equivalent (FTE) students, headcount, and levels of instruction, are the basic ingredients that drive the budget formulas in the preparation of the current expense budgets at the campus and the segmental levels. They also represent the basic workload units that serve the Commission, the Department of Finance, the Office of the Legislative Analyst, the Legislature and the Governor as the fundamental measures of need in their review and evaluation of the segmental budgets. It is essential that these figures be determined with extreme care and professional judgment.

The Enrollment Projection Model of the Population Research Unit: The Legislature created the Population Research Unit within the Department of Finance as the State's official demographic unit to provide demographic data to all levels of government and State agencies. In addition to providing demographic data on population trends, the Unit is charged specifically in the Government Code to provide enrollment projections for all public education in California, including public schools as well as colleges and universities.

The basic enrollment projection method used by the Population Research Unit since 1975 is an age/sex participation rate model compared to an age/sex population projection for each county. The current population base is the Department of Finance's Interim E-150 baseline projection series which assumes a completed fertility rate of 2.1 and a statewide annual average net migration of 150,000. This population base is modified by excluding persons residing in military barracks, State institutions, and full-time students at local four-year colleges and universities.

For each year of historical data, the various enrollment categories are divided into age groups and related to the appropriate population age groupings. The enrollments and corresponding population age groups are as follows:

Enrollment	Population
19 and under	18 and 19
20 to 24	20 to 24
25 to 29	25 to 29
30 to 34	30 to 34
35 and over	35 to 64

The comparisons between the enrollment and population age groups are expressed as participation rates per 1,000 persons in the total population age group. Each age/sex/enrollment category thus comprises a rate series. These 50 rate series (male and female times five age groups times five enrollment categories) are then independently extrapolated for ten years using linear regression. Several models which utilize variations of the least-squares regression slope are graphed for each of the age/sex/enrollment categories. The analyst, using a general knowledge of enrollment trends and a more specific knowledge of the plans of each district or segment, determines which of the projected series is most reasonable for each of the fifty rate series. The projected participation rates are then applied to the appropriate age/sex population base and the resulting enrollments are summed to obtain a district/segmental total.

Recent modifications to this basic projection program have included the option of excluding a year of historical enrollment from the series if it is felt this year does not accurately reflect the general pattern of enrollment. For instance, there may have been a definitional change in noncredit or an unusual switch between evening and noncredit enrollment categories. It is also possible to reset the last historical year's participation rate if it is felt the enrollment in that category produced an unusually high or low participation rate and is not reflective of current district/segmental plans. It is also possible to set both the beginning and ending participation rates. This technique would be of particular use if the analyst knew of specific district/segmental plans for the various enrollment categories.

California Community Colleges Projections: The Population Research Unit works closely with the Community College campuses and districts and with the Chancellor's Office. For example, through a mutually acceptable format, computer-readable fall enrollment data for all campuses are supplied to the Unit by the Chancellor's Office as soon as campus reports are compiled. Ten-year enrollment projec-

tions developed by the Unit are sent to the Chancellor's Office and to each district early in the budget formulation process. The Unit's relationships with each district are such that most policy changes that might impact on enrollment projections for a district are well known and understood and can be reflected in the Unit's projections. Staff from the Population Research Unit attend and participate in the annual Community College Capital Outlay Workshops that are held throughout the state. When a district or campus questions the enrollment projections for their area or institution, the two groups resolve these questions in a timely manner.

Individual district enrollment projections are also available. Normally these projections are made for a ten-year period. At the request of Commission staff, the Population Research Unit has extended their segmental projections to the year 2000. These are status-quo projections, and changes in district/State/federal policies will require reexamination of these data.

California State University and Colleges Enrollment Projections: The Population Research Unit provides ten-year segmental enrollment projections (undergraduate and graduate headcount) to the Chancellor's Office of the State University and Colleges. The Office of the Chancellor converts the headcount projections to FTE and, based on their intimate knowledge about each campus and its programs, distributes the totals among the 19 campuses. These projections drive the various budget formulas in the support budget and determine the need for capital outlay. The Institutional Research Division in the Chancellor's Office has indicated that the projections received from the Population Research Unit are consistent with their own projections and are reasonably accurate.

University of California Enrollment Projections: The Population Research Unit annually provides the University a ten-year systemwide projection of undergraduate and graduate enrollments that are derived through age/sex participation rates for each county. University of California undergraduates have been comprised historically of high school graduates in the traditional college-age group (18 to 24), hence the rates used for the various age categories are vastly different from those in the other two public segments. These data do not appear to be used by the University. Instead, each campus makes its own projections, negotiates mutually satisfactory figures with the President's Office and utilizes these results for the support and capital outlay budget. The University maintains a demographic unit within the Academic Planning and Program Review Division of Systemwide Administration.

Potential for Enrollment Forecasting: While California has employed enrollment forecasting procedures for a number of years to assist in the development of segmental budgets, little attention has yet

been given at the State level to the use of enrollment estimating as a tool for segmental, regional, or even institutional management. Advances in student enrollment data collection and processing procedures within California in the last decade, and the emergence of sophisticated computer-based enrollment modeling systems at the national level, suggest that more definitive estimating methodologies can be developed and employed. The fiscal constraints that have become facts of life for higher education in recent years, coupled with the generally accepted notion that the future holds fewer students rather than more, argue that improved enrollment estimating methodologies are not the luxuries that they may appear to be at face value, but rather a necessary condition for continued institutional and segmental welfare.

Planning by the California Postsecondary Education Commission

The primary responsibility for State level planning for California postsecondary education rests with the Commission, and the current status and future plans of the Commission for fulfilling its responsibility for long-range planning are addressed in the companion document, The Challenges Ahead: A Planning Agenda for California Postsecondary Education, 1982-1987. Over the past three years, the Commission has increasingly stressed the importance of more rigorous review of existing and proposed programs, at the campus, segmental, and statewide levels, as well as closer links between program review and statewide budget development, as components of an improved state-level planning process.

Developments in Program Review: To strengthen state-level program review, the Commission has made a series of recommendations over the past three years regarding specific segmental and statewide program review procedures. In 1978, the Commission called attention to the increasing importance of the review of existing degree and certificate programs on each campus, and its special significance during a period of declining enrollments and tighter budgets. In the area of review of new programs, the Commission recommended restraint in the development of new programs, in view of the budgetary uncertainties brought about by Proposition 13 (California Postsecondary Education Commission, 1978a).

In its next report on program review activities, the Commission noted that "judging from the number of proposals for new or modified programs . . . it appears that all three public segments proceeded with appropriate caution in curricular expansion" during 1978-79 (1980a, p. 1). In the area of review of existing programs, the Commission suggested that: (1) "the systemwide administrative offices in each segment should be expected to develop a model for program evaluation to insure that there is some degree of consisten-

cy and uniformity in the review process throughout the system;" (2) "their offices should also design reporting procedures that are sufficiently standardized to allow for reasonably comparable summaries of the results of program review on individual campuses;" and (3) "the central office should also initiate systemwide reviews of programs in a given field of study" (p. 9). The Commission noted that both the University and State University had published reports during 1980 that emphasize the importance of program planning and review as the segments face the uncertain enrollment and fiscal prospects of the 1980s. "Taken together," the Commission stated, "these two documents represent a commendable level of professional responsibility in the management of two segments of public higher education in California. While seeking to protect quality and extend access, they nevertheless prepare the way for the painful surgery that the curriculum may have to undergo, should future events make it necessary" (p. 11).

As noted earlier, the University and State University have moved to implement the recommendations in their own and in the Commission's reports. Each system has established a more centralized procedure for systemwide review of program development and evaluation. Data is being collected in each system that should allow for comparisons among similar programs at different campuses. Procedures are now in place in both the University and State University for the initiation of systemwide reviews of programs in a given field of study, and are being developed for systemwide monitoring of the implementation of recommendations resulting from the systemwide reviews.

In its "Progress Report on Program Review Activities" of October 1980, the Commission staff described those developments in segmental program review activities and concluded that:

> It is clear from this brief summary that an impressive amount of attention is currently being directed toward all aspects of curricular planning and review, and that there appears, in general, to be satisfactory compliance with the spirit, if not always the letter, of the Commission's recommendations. These recommendations were intended, above all, to encourage actions and procedures at all levels of public postsecondary education that might bring the economy, availability, and quality of programs into the best possible balance. Many of the (segmental) measures described here seem clearly directed toward that end (California Postsecondary Education Commission, 1980e, p. 18).

Current Status of Program Review: In late 1980, the Commission asked Frank Bowen and Lyman Glenny to evaluate statewide program review practices. They completed their study in April 1981, after

extensive consultation with segmental representatives and Commission staff. Since then, each segment has had an opportunity to review and comment on their final report, Quality and Accountability: An Evaluation of Statewide Program Review Procedures, and its recommendations. Their study has served as a vehicle for directing attention to program review practices at all levels, and since the report will be used as a basis for reexamining the Commission's 1975 Program Review Guidelines and Procedures document, it will continue to stimulate discussion on the topic.

The Bowen and Glenny study, conducted independently of Commission influence, presents conclusions that, for the most part, reinforce approaches the Commission has advocated for a number of years. For example, implicit in the study is a principle that the Commission has enunciated on a number of occasions, the idea that the primary responsibility for review of existing programs must rest with faculty and administration on each campus, and that the role of State-level agencies such as segmental offices and the Commission should be to promote, encourage, facilitate, and coordinate curricular review activities. Only if a campus proves unable or unwilling to assume responsibility for reviewing its own curriculum should the segmental office intervene in the actual review process.

The report also stresses, as has the Commission, the importance of systemwide and campus refinements of statements of institutional mission, not only as a point of reference for program review, but also as a means of insuring diversity and promoting quality. In its annual reports on program review activities, the Commission has recommended that the University of California and the State University and Colleges designate certain campuses for the development of distinguished graduate programs in selected fields rather than allowing more or less random growth of graduate programs in these fields. The premise is that it is in the public interest to offer superior graduate programs in economics, music, or political science, for example, on five campuses rather than on fifteen where they will possibly remain undersized and undistinguished because of an insufficient concentration of resources. The Commission has recommended a similar approach to highly specialized occupational programs in Community Colleges.

The development of a systemwide plan for the location of selected programs assumes an active role for the segmental offices not just in the review of mission statements and proposed programs, but in monitoring the review of existing programs on all campuses as well. The Bowen and Glenny report presents a series of recommendations concerning the review of existing programs, calling for continued involvement of segmental central offices in efforts to facilitate and coordinate curricular review on the campuses, and endorsing the concept of intersegmental review of selected disciplines, procedures

for which are outlined in the Commission's existing program review guidelines. Efforts to conduct such reviews have been hampered by a variety of circumstances, but the Commission staff remains convinced that coordinating the concurrent review of programs at all levels in a given field--computer science or engineering, for example--constitutes an appropriate and worthwhile Commission contribution to program review efforts.

The report also recommends that the Commission shift its emphasis from a careful review of proposals for each new program to an evaluation of programs projected in the five-year plans of the segments. Such an emphasis should identify and allow for the resolution of potential intersegmental conflicts before they arise. It should also lead to the development of a State program plan that integrates the program plans of the segments with State goals and priorities. Ideally, such a plan would serve to guide and direct program review at the campus, as well as the statewide level. These recommendations derive, in part, from the authors' observation that "state and segmental reviews of new and existing programs are not guided by ordered expectations of the relationships between academic and occupational programs and state and segmental policies and planning objectives" (Bowen and Glenny, 1981, p. 40).

The report may overestimate the possibility of tying program review more closely than it has been to "state and segmental policies and planning objectives" and understate the extent to which "ordered expectations" now guide the review process. Nevertheless, the goal implicit in this series of recommendations is widely accepted and is consistent with the directions outlined in the Commission's original guidelines and procedures. Despite the primary responsibility of the campuses for reviewing their own programs, segmental offices and the Commission will have to become increasingly influential in the review process. Determination of the proper number and distribution of programs, their interrelationships, their differentiation in purpose and function, and their economy and overall effectiveness are decisions that cannot be made entirely by the individual campus. Such decisions, involving unavoidably the elimination or consolidation of some existing programs, present the major challenge to the program review process during the next decade.

BARRIERS TO BETTER PLANNING

Identifying elements essential to good planning at the campus, segmental, and statewide levels is an important step in improving planning for postsecondary education. A number of barriers, however, must be overcome if the segments and the Commission are to improve their planning.

In July 1981, each segment was asked to respond to the following question: Given the nature of the environment for postsecondary education in the 1980s, what do you feel are the greatest barriers you face in improving your planning process (at both the systemwide and institutional levels)?

Most of the segments' responses were divisible into two distinct categories: those barriers that inhibit improved planning in all segments, and those that are specific to a particular segment.

Common Barriers

Barriers to better planning that affect all segments include the following:

- The uncertainty of a stable State financial base to support both quality and diversity in educational programs.
- Increased regulation and compliance demands, often with conflicting or duplicative requests for information.
- Absence of reliable statewide demographic data related to potential enrollments in the next two decades, particularly with respect to the needs for lifetime learning and to the rapidly changing characteristics of the population.
- Lack of good evaluation data to assess achievement and performance of existing programs.
- Uncertainty about the long-term effects of the institution of collective bargaining in the public postsecondary segments.
- Lack of adequate staff and resources for ongoing planning with the result, as one segmental representative stated, "that too much time is spent putting out fires and not enough time preventing them in the first place."

(A number of these barriers to better planning are discussed at greater length in the final paper in this volume, "The 1980s Environment for California Postsecondary Education.")

Specific Barriers

Several segments cite additional barriers specific to their own planning.

For the California Community Colleges, these include the lack of explicit statewide goals and objectives adopted by the Board of Governors and recognized by the Legislature; the dual governance structure of the Community Colleges; and the overall inexperience of district- and state-level staff in the implementation and maintenance of an ongoing planning process.

The Adult Education Unit of the Department of Education cites the following specific barriers: changing public policy with regard to adult education and its relationship to the other segments of postsecondary education; competition for clients among the various adult education delivery systems--both public and private, profit and non-profit--which leads to duplicative or artificial needs assessments; and difficulties of articulation and dissemination of information and plans developed by the various segments providing adult education.

Finally, the California Advisory Council on Vocational Education lists the following as barriers to improving their planning: the lack of a comprehensive planning mechanism at the State level to provide the necessary information for administrative decision making regarding vocational education; the need for a common data base and planning cycle for all the constituencies involved in vocational education; the focus on compliance with U.S. Department of Education regulations rather than on statewide and local needs; and the need for stronger executive leadership and commitment to vocational education at the State level, in order to provide the impetus for establishing effective planning and coordination among the various vocational education and employment training systems in the State.

Despite these barriers to better planning, all of the segments of postsecondary education have expressed a commitment to improving their planning processes. Their continued will to do this, combined with the strength and vitality of California's postsecondary system, and the assistance that the Commission can provide, should prove to be important factors as the segments face the issues and challenges that lie ahead.

FINANCE POLICIES, PROSPECTS, AND ISSUES

This essay describes the financing of postsecondary institutions in California since the 1960 Master Plan. In retrospect, the areas of debate over finance have remained remarkably constant during these 20 years:

- the effect of finance on quality and diversity;
- alleged encroachments on autonomy by the budget process;
- methods of funding enrollment changes;
- levels of student charges in public institutions;
- the role of State aid for private institutions;
- balancing State funds and local control for the Community Colleges; and
- funding services for special clientele.

This continuity does not indicate that efforts toward solving the dilemmas within these areas have been inconsequential or, alternately, that the challenges are insurmountable. Rather, these areas seem to contain the enduring controversies of the fiscal relationship between government and institutions. These dilemmas will likely never be answered with finality.

Within the universe of postsecondary finance in California, certain limits have to be imposed on this essay. Because of the Commission's role as the State's coordinating and planning agency, it seems reasonable to pay primary, though not exclusive, attention to postsecondary financing provided through the budget mechanisms of the State of California. Specifically, this essay answers three questions: What are the State of California's major policies for financing the current operations of postsecondary institutions? What is the ability and willingness of the State to support the public institutions of postsecondary education? And what will be the major issues at the State level during the remainder of the 1980s?

The essay is divided into five parts:

- Part One describes the size and sources of support for all postsecondary institutions in California, as background for what follows.
- Part Two discusses the State's policies for financing these institutions and argues that the policies come from California's Master Plan for Higher Education, the peculiar nature of educational "costs," and the State's fiscal system.
- Part Three deals with past and projected support levels of public institutions in California. It shows that the State did not reduce support for its public institutions as a proportion of its total expenditures during the "taxpayer revolt," but that funding levels have fallen significantly compared to levels in other states.
- Part Four asks whether the future promises a stronger showing and answers, probably not. Some doubt about the continuing ability of public institutions to secure their past share of State support appears reasonable.
- Part Five catalogues the issues which will draw attention during the 1980s: the problems with formulas for the public segments; increasing accountability for public institutions; the need for institutions to diversify their sources of support; the flux of policies for student charges and financial aid; and the changing role of the State in financing private institutions.

CURRENT SUPPORT FOR THE OPERATIONS OF POSTSECONDARY INSTITUTIONS

In terms of diversity and resources, no word better describes California's system of postsecondary education than "abundance." Over 400 colleges and universities offer degrees of every sort; they spent more than $6.9 billion in 1978-79 doing so. New York was next in total expenditures--but 40 percent less. Beyond California's colleges and universities, more than 200 school districts run Adult Schools, and 39 counties offer Regional Occupational Programs to provide continuing education and technical skills for their residents. Over 2,000 proprietary schools offer certificate programs ranging from flight instruction to cosmetology and collected an estimated $31.1 million in 1978-79 from their students. Although no comparable measures exist for instruction by noneducational institutions, recent surveys reveal much inservice training

by business and government (California Postsecondary Education Commission, 1978b; Kost, 1980). This universe of postsecondary education is displayed in Table 1.

Within this universe, there are four general sources for support:

1. The Federal Government: During the past 20 years, Washington has pursued three policies in postsecondary education: to provide access for disadvantaged students through financial aid and enforcement of civil rights legislation; to support research which is "in the national interest;" and to provide some institutional aid which promotes certain professions or vocational training. In terms of its fiscal commitment to implement these policies, the 1972 amendments to the 1965 Higher Education Act marked a dramatic redirection of federal efforts. That year, the debate was joined over how best to provide aid: through institutional grants based on enrollments and costs, or through assistance direct to students and portable to any institution. The latter approach prevailed, and has since overwhelmed all others in the constellation of federal programs. Including guaranteed student loans, federal financial aid approached $900 million in California during 1979-80. Following financial aid in size was the $300 million committed to the laboratories of the U.S. Energy Research and Development Administration, which are managed by the University of California. In addition, the federal government provided funds for vocational education, agricultural extension, and research projects. Federal spending for higher education in California approached $2 billion in 1978-79.

2. The State of California: The State has primary responsibility for public institutions and provides some financial aid to students in private institutions. Currently, it supports virtually all of the regular instruction and administration of the University of California, the California State University and Colleges, and the California Community Colleges--a total State commitment, including property tax revenues, of $3.5 billion in 1980-81. The California Constitution prohibits direct State aid to private institutions, so that the policy is to offer substantial student aid programs, with the dollars being provided to students in independent colleges and universities. The State is also involved heavily in "adult" or "continuing" education, primarily through the Adult Schools and the California Community Colleges.

3. Consumers: Students pay a variety of charges to California's colleges and universities: $948,454,000 in tuition, fees,

TABLE 1

ENROLLMENTS AND EXPENDITURES FOR INSTITUTIONS OFFERING POSTSECONDARY EDUCATION IN CALIFORNIA, 1978-79

Sector (see Note below) and Segment	Number of Institutions	Enrollment	Total Expenditures	State Appropriations
FIRST (COLLEGES AND UNIVERSITIES)				
Public Institutions				
University of California	9 campuses	127,664 headcount 119,628 FTE	$2,700,547,356	$ 767,049,891[a]
California State University and Colleges	19 campuses	326,513 headcount 228,939 FTE	$ 908,005,644	$ 682,983,474[a]
California Community Colleges	104 colleges	1,159,819[b] headcount 642,456 ADA	$1,257,245,838[c]	$1,126,000,000[e]
Other Institutions and Agencies of Postsecondary Education[d]	Not Applicable	c. 2,000 headcount	$ 97,757,000	$ 82,435,000
Adult/Vocational Education:				
Adult Schools in K-12	c. 225 districts	147,089 ADA	$ 136,355,889	$ 128,930,615[f]
Regional Occupational Programs/Centers	39 counties	16,297 ADA	$ 41,147,011	$ 33,619,286[g]
Independent Institutions				
Degree Granting	368 total 125 reporting	180,884 headcount	$1,724,239,000	$ 51,484,000[h]
SECOND (PROPRIETARY)				
Profit-Making Schools which Offer Vocational Training	2,123	c. 300,000	$ 31,080,000[i]	$ 2,759,139[k]
THIRD (NON-EDUCATIONAL INSTITUTIONS)				
Business, Industry, Labor Unions, Government, Military, and Community Groups	? ("an extensive array and range of efforts and of considerable financial investment"[j])	?	? (one example: Federal agencies spent $10,500,000 training their employees)	?

a. Appropriated to the System or institutions directly.
b. Fall term, 1978.
c. General Fund Expenditures of the 70 districts.
d. California Postsecondary Education Commission, the California Maritime Academy, Hastings College of the Law, State Operations of the Community Colleges, and the Student Aid Commission.
e. State General Funds for regular apportionments and "bail out," plus property tax revenues (including State funds for property tax relief).
f. Local Assistance plus State Operations.
g. State General Funds plus income from revenue limits, including property taxes.
h. Total of Cal Grants A and B to students at independent institutions.
i. Estimated by multiplying the total number of students by $1,036, the average cost for an occupational course in 1979. See California State Department of Education, 1980, pp. 4-5.
j. California Postsecondary Education Commission, 1978b, p. 29
k. California Occupational and Training Grants (Cal Grant C), available to students in proprietary schools.

Note: The expansion of educational opportunities beyond high school has caused some problems of definition and labeling. In Three Thousand Futures, the Carnegie Council on Policy Studies in Higher Education offers the following terms:

> We identify the Third Sector as institutions that give postsecondary education as an adjunct to noninstructional activities: instruction by a corporation, a research agency, a museum, a trade union, the armed forces. The First sector is made up of nonprofit colleges; the second of profit making institutions. The boundaries of the First Sector and of the Second Sector and the addition of the Third Sector mean that the edges of the total universe of postsecondary education are softer than ever before.... The Second Sector and the Third Sector are nibbling away at the enrollments of the First Sector, as well as tapping new markets (1980, p. 22).

Sources: Governor's Budget, 1980-81, pp. E 82-84, 125-127, 190.
California State Controller, 1980, pp. 532, 533, 582-589.
Office of the Legislative Analyst, 1980a, p. 984.
California State Department of Education, 1980, pp. 3-4.
National Center for Education Statistics, 1981a, p. 2.

and charges for all educational activities in 1978-79, which cover almost 20 percent of their total Educational and General Expenditures. Privately controlled institutions, of course, levy much higher student charges: 50.3 percent of their Educational and General Expenditures. In addition, consumers purchased goods and services such as books, food, dormitory rooms, tickets to sports events, hospital care, and research projects. Income from this source, broadly defined, appears to constitute about one-third of the total income of California's colleges and universities in 1978-79, or $2 billion (National Center for Education Statistics, 1981a, p. 124).

4. Gifts and Endowment: The total market value of this income source for all California colleges and universities in 1978-79 was $1,561,026,000, with a yield of $91 million or 5.8 percent. Again, public and independent institutions were distinct. The 135 public colleges and universities recorded a year-end market value of $392.8 million for their endowment (the vast majority being concentrated in the University), while 125 privately controlled institutions reported $1,087.1 billion--two and a half times as much (National Center for Education Statistics, 1981a, p. 242). Among the public institutions, only the University of California rivals the larger independents in the size of its endowment.

A second way to catalog sources of support is to organize them according to the role that the providers play in the day-to-day life of the institutions. This alternate way suggests some of the dynamics and stresses within the institutions. After all, the expectations of providers are crucial in directing the energies of the institutions: the further away the source, the more freedom for institutions but the more potential for misunderstandings.

1. Internal Assets: Some resources are internal--assets of public and private institutions which are managed, almost exclusively, by administrators and trustees. These assets are the discretionary resources of the enterprise, called by one observer, "the venture capital of higher education" (Kramer, 1980). He estimates that 12.7 percent of Educational and General expenditures among colleges nationwide were in this internal assets category during 1976-77 (p. 52).

2. Users of Institutional Services: Some resources, approximately 30 percent of the total revenues of colleges and universities in California, are secured directly from individuals and corporations who use institutional services. These funds support activities which, at least indirectly,

are designed to serve customers and respond to their opinions. Students want instruction to meet their needs and expectations; sports fans like winning teams; corporations insist that the terms of research contracts be fulfilled. In varying degrees, the institutions are directly accountable to these customers.

3. Tax Revenues: Some resources are provided by other people--taxpayers. This source was the single largest for California's colleges and universities in 1978-79, in terms of general institutional funding and unrestricted grants: 55.5 percent of their current fund revenues (National Center for Education Statistics, 1981a, p. 124). The vast majority of the funds, of course, were provided to public institutions. The relations of the postsecondary institutions with the providers of this source are more complex and distant than with the other two, partly because most interaction occurs through intermediaries such as public officials and central control agencies.

STATE POLICIES FOR FINANCING POSTSECONDARY EDUCATION

The State's policies are quite different across the spectrum of institutions. The 1960 Master Plan for Higher Education, the peculiar nature of educational costs, and the State's fiscal system have each shaped the content and evolution of finance policies.

The Master Plan for Higher Education

The Master Plan defined the structure, function, and goals of institutions so that they could collectively accommodate the throng of students who were expected to seek admission in the 1960s. Although the Master Plan was not explicitly a fiscal document, several of its tenets have become firm policies for financing.

First, its emphasis on access led the State to continue policies of no tuition and low fees in all public segments, and was translated into a policy of open admissions in the Community Colleges with virtually no student charges there (Academy for Educational Development, 1973, p. 26). In addition, the Community College districts were encouraged to distribute their offerings throughout the State: over 100 campuses exist today and courses are taught at more than 2,700 off-campus locations. Such policies enable the Community Colleges to enroll 1 of every 12 adult Californians, one of the highest participation rates in the nation.

Second, beyond the "open access" Community Colleges, the Master Plan defined certain eligibility pools--the top 12.5 percent of high school graduates would be eligible for the University and the highest third for the State University--and assured the opportunity for all Californians within these pools to attend some campus within the segment. Implicit in this invitation was the commitment, now a State policy, that the four-year segments would be funded for all eligible undergraduates, both freshmen and transfers from Community Colleges. Even in the stringent budgets of 1978-79 and 1981-82, the State budgeted enough funds to instruct all undergraduates projected to attend the University and the State University.

Third, the Master Plan established different functions among the public segments. The University would alone conduct State-supported research (it received $75 million from the State for organized research in 1980-81 and to allow sufficient time for additional research, its teaching loads were half that for faculty at the State University). The University would provide doctoral and professional degree education, while the State University would concentrate on baccalaureate and master's degree programs, and teacher education. The junior colleges were removed from under control of public school districts and were established as a segment of higher education. They were to serve primarily as institutions for transfer students with a large component devoted to vocational education and terminal degrees.

Fourth, the Master Plan encouraged the "greatest possible diversity," and recognized the "great contribution private colleges and universities have made and will continue to make to the state," in terms of this diversity (Liaison Committee, 1960, p. xii). One fiscal policy to help achieve this goal was to expand student financial aid and allow some students the alternative of attending high tuition colleges. Recently, the State's Student Financial Aid Policy Study Group concluded that "the state should continue its policy of helping needy students meet the costs of attendance at private institutions," primarily because their diversity, ranging from religious studies to auto mechanics, enables students to pursue uniquely personal interests (1980, p. vii. For comments on the fiscal implications of the Master Plan, see Hitch, 1974.)

The Nature of Educational "Costs"

The "costs" of education have subtly influenced the State's policies, particularly because this term, when applied to colleges, has a different meaning than the one commonly associated with it. By the "cost" of a product, we generally mean the minimum dollar value of the resources needed to produce a finished item. We assume that technology and market prices converge to produce an objective measure called "cost."

In the world of higher education, "costs" do not have this objectivity. As economist Larry Leslie puts it, "The first premise in understanding costs in higher education is that in the aggregate, institutions generally spend whatever they receive. The second premise is that differences in cost will reflect, in considerable part, the relative success, over time, of each educational unit . . . in obtaining funds from all sources" (1980, p. 10). Similarly, Howard Bowen, among the most prominent scholars on the economics of higher education, points out that unit costs of operating colleges are set more by the money provided to them "than by the inherent technical requirements of conducting their work." He stresses "the fundamental fact that unit cost is determined by hard dollars of revenue and only indirectly and remotely by considerations of need, technology, efficiency, and market wages and prices" (1980, pp. 15, 19).

In order to explain this, Bowen offered his famous five "Laws of Higher Education Costs:"

1. The dominant goals of institutions are educational excellence, prestige, and influence;

2. In the quest of excellence, prestige, and influence, there is virtually no limit to the amount of money an institution could spend for seemingly fruitful educational ends;

3. Each institution raises all the money it can;

4. Each institution spends all it raises; and

5. The cumulative effect of the preceding four laws is toward ever increasing expenditure, even without inflation (pp. 19-20).

Given the self-fulfilling nature of costs in Bowen's "revenue theory," how are ambitions and expenditures controlled? "The duty of setting limits . . . falls, by default, upon those who provide the money, mostly legislators and students and their families," he asserts. Given this responsibility for setting limits, should the State prescribe detailed controls over appropriations? No, says Bowen, this would destructively interfere with the institutions. How, then, can the costs of higher education be held down? "When public agencies or governing boards wish to control costs," Bowen contends, "they need do only two things: first, to establish in broad general terms the basic scope and mission of the institutions for which they are responsible, and, second to set the total amount of money to be available to each institution each year" (pp. 20, 24). The "cost" of higher education will then be determined.

Bowen's theory is useful to understand the functioning of the Master Plan and certain State practices. The Master Plan has been a success, partly because it fulfilled Bowen's first axiom: it established the basic scope and mission of the segments. In addition, it identified certain activities which the State would not fund:

1. Ph.D. programs or professional schools outside the University of California;

2. Research in the State University or the Community Colleges;

3. Instruction for freshmen and sophomores within four-year public institutions who did not meet certain eligibility requirements;

4. Unnecessary duplication;

5. Continuing education or non-degree work at the University or the State University; and

6. All auxiliary services such as housing, food, and parking.

State budget practices fulfill Bowen's second axiom of limiting the total amount of money available to the institutions. For example, until 1975 the Community Colleges enjoyed a finance formula similar to the one for public schools: there was an open-ended commitment to fund all students who enrolled. Large annual increases from additional enrollments convinced Governor Edmund G. Brown Jr. to impose a 5 percent limit on additional State appropriations in 1975-76, a restriction which Community College leaders deplored as anathema to "open access." This limit was removed in 1976-77 in legislation which became moot in 1978 under the assault of Proposition 13. As a permanent part of Community College finance, the Legislature has subsequently decided to fix total State appropriations each year, based on some modest projections of enrollment growth. Re-emphasizing its policy against any commitment to fund all enrollments, the Legislature recently denied funds to relieve a 1980-81 deficit caused by an increase in the numbers of Community College students far beyond projections. In most cases, the State has adopted Bowen's second axiom of limiting funds, in the short term at least, for postsecondary institutions.

The State's Fiscal System

California's system has influenced postsecondary institutions far beyond its function as a conduit for funds. This has occurred because of incremental budget practices, a strong executive branch,

the large number of local entities, and a Constitutional prohibition against direct aid to private institutions.

First, the State budgets by incremental practices, despite the formality of presenting expenditures as program budgets which link appropriations to objectives (Balderston and Weathersby, 1972; California Coordinating Council for Higher Education, 1968). During normal times, most institutions expect to receive their prior year's appropriations plus funds for inflation and a few new programs. Despite initial hopes to the contrary, Aaron Wildavsky's definition of budgeting applies well to California: "an incremental process, proceeding from an historical base, guided by accepted notions of fair shares, in which decisions are fragmented, made in sequence by specialized bodies, and coordinated through repeated attacks on problems . . ." (1974, p. 62). Another student of State government, Jerry Evans, believes that those within the State's apparatus for managing the budget (the Department of Finance, the Legislative Analyst, and staffs of the fiscal committees) are not concerned so much with holding down expenditures as with "the objectives of legality, efficiency, policy conformance, prudent management, and maximum program accomplishment" (1976, p. 23). One of the disruptive aspects of Proposition 13 was not simply the trauma of fewer funds, but the temporary suspension of time-honored assumptions underlying the State's budget process.

Second, California has an executive branch with a powerful role in the budget process. The Governor's Department of Finance prepares the Budget after long hearings with agencies and institutions. The Governor then presents this omnibus budget in January of each year, and it winds its way through a Legislature increasingly active in budget matters until adopted in June and signed by the Governor who can veto or reduce any appropriations. All budgets funded through this process necessarily bear the distinct imprint of the executive branch.

Third, the State's funding of its 6,000 local entities (cities, counties, special districts, school districts, and community colleges) is decentralized and fragmented. Although 80 percent of the State's General Funds flow to these entities, the sheer number of them prevents rigorous State oversight or control. Additionally, the Constitution provides them some defense against incursions from Sacramento. As an example, the Legislature prohibited salary increases for local employees since none were granted to State workers in 1978-79. Citing "home rule" and "impairment of contracts," the California Supreme Court in Sonoma County Organization v. County of Sonoma (1979) declared this aspect of the State's "bail-out" unconstitutional. The Court's opinion presents a strong defense of the difference between State responsibilities and local autonomy, a tradition in California (Speich and Weiner, 1980, pp. 44-45).

Finally, the framers of California's Constitution feared that officials might be tempted to use the public purse for private gain. To prevent this, they adopted a clear prohibition against State grants to private entities:

> No money shall ever be appropriated or drawn from the State Treasury for the purpose or benefit of any corporation, association, asylum, hospital or any other institution not under the exclusive management and control of the State as a state institution . . . (Article XVI, Section 3).

As we shall see later, this has limited the State's direct support for independent colleges and universities.

How have these characteristics of State finance influenced postsecondary institutions? The impact differs for each segment, depending on whether the institutions are State, local, or private.

Impact on State Institutions: Both the University and the State University are considered State institutions, and are organized as "systems" of 9 and 19 campuses respectively under their single governing boards. Each system receives funds through a line item in the State's Budget Act which classifies its activities into a dozen major programs. Both are subject to the State's annual "budget cycle," which begins months before the next fiscal year each July 1. In October, the systems estimate their base budgets for the current year according to the Program Classification System, calculate baseline adjustments by negotiating inflation increases with the Department of Finance, and request program/budget enrichments, including request for cost-of-living adjustments in salaries. Customarily, the Governor reduces each segment's requested enrichments substantially, and then forwards the base budgets with adjustments and enrichments to the Legislature. Although most State funds are provided for instruction, which is based on enrollment formulas (fixed student/faculty ratios for both the University and the State University), support for other programs is substantial and receives much attention in the capitol. Their final budgets generally include a cost-of-living increase for salaries, which is then applied to a statewide salary schedule within each system. It is important to note that the budgets of these systems are not driven wholly by enrollments: an analysis in 1980 revealed that small changes in the number of full-time-equivalent students directly affected the funding of 53 percent of the University's State budget and 64 percent of the State University's budget through formula recalculations (California Postsecondary Education Commission, 1980b). Recent legislation allowing collective bargaining could influence this process and its results.

Impact on Local Institutions: As local institutions, the Community Colleges and the Adult Schools operated by high school and unified school districts have proceeded along different lines than the other public segments. As opposed to the standard Program Classification budgeting and the "budget cycle" of the four-year segments, the State's apportionments to the Community Colleges and the Adult Schools have been distributed through general grants based almost entirely on each district's Average Daily Attendance (ADA). After combining these apportionments with property tax revenues, local boards of trustees enjoy substantial latitude in allocating the funds among most activities, including expenditures for salaries which vary widely among the districts. Collective bargaining, now in its fourth year for the Community Colleges, has influenced these decisions on a district-by-district basis.

For several years, certain centralizing forces have been apparent. Chief among these forces was Proposition 13, which effectively ended the system of "local" finance for the Community Colleges by eliminating district control over property taxes. Before 1978, each district could determine its own general purpose tax rate, up to a certain maximum, along with several "permissive" taxes (primarily for community service and capital outlay). Proposition 13 limited any ad valorem tax on real property to 1 percent of its full cash value, specified that property taxes were to be collected county-wide, and made the Legislature responsible for distributing the revenues. Although districts retain wide latitude for expenditure of funds, the State now determines their total revenues, and the Community Colleges have few methods of raising additional, discretionary monies. Fully 75 percent of district revenues statewide now come from State General Funds, another legacy of property tax limitation. These changes have fostered much instability: the State has yet to agree on a permanent system of finance for these local institutions due to the dilemma of reconciling local authority over budgets with the State's need to control its appropriations.

Impact on Private Institutions: In general, privately controlled colleges in the West have not reached the size or prestige of those on the eastern seaboard, where public institutions grew slowly under the imposing leadership of the privates. To a great extent, California's independent institutions are an exception to this pattern of a modest private sector in the West. A few private institutions here have long histories--two extending back to Gold Rush days--and others rival the most prominent universities in the nation. The independent segment in California consists of many institutions, twice the number of campuses (including nonaccredited institutions) as the three public segments combined. Concentrated in Los Angeles and the Bay Area, they dominate the awarding of graduate and professional degrees in California, partly because of the Master Plan's restrictions on the State University. With some

exceptions, these colleges and universities are financially healthy (California Postsecondary Education Commission, 1978c, pp. 2-5).

Despite their respectable presence, independent institutions play a minor role in State finance compared to the public segments. This is so because of the tradition in western states of low tuition and a multitude of well-supported public colleges and universities and because of the prohibition in the California Constitution against appropriations for institutions "not under the exclusive management and control of the state."

As a counterpoint to these limitations, the State has been encouraged to view "all institutions of higher learning in California, public and nonpublic . . . as a total resource to the people of the State . . ." (Select Committee on the Master Plan, 1972, p. 54; Joint Committee on the Master Plan, 1973, pp. 63-65). Independent institutions participate in State finance in two ways: contracts and student financial aid.

Contracts and agreements between the State and independent institutions have assumed several forms. The California Education Facilities Authority, established in 1973 to provide independent institutions "an additional means by which to expand and enlarge and establish dormitory, academic and related facilities" (Education Code, Section 94100, Chapter 2, Article 1), has used the State's credit to guarantee revenue bonds for nine institutions. Separate agreements between the University of California, Drew Medical School, and the California College of Podiatric Medicine have extended State support, and these have not run afoul of the Constitution. Other contracts between the State and independent institutions, however, have been declared unconstitutional. These include the Grunsky "Aid to Medical Schools Program," and the Medical Students Contract Program. A recent Supreme Court Decision, Stanford University v. Kenneth Cory (1978) has severely limited the kinds of contracts which the State can negotiate with private institutions.

State student aid programs, by providing money to students, are not subject to such constitutional restraint. Established in 1955 partly to relieve the projected pressures on crowded public facilities, the State Scholarship Program (Cal Grant A) provided $214 million to 50,000 students in independent colleges during its first 20 years (California Postsecondary Education Commission, 1978, p. 24). In 1980-81, the California Student Aid Commission provided funds totaling almost $60 million to students in independent institutions (Odell and Thelin, 1980, p. 29. Statistics cover only member institutions of the Association of Independent California Colleges and Universities). Even though overcrowding in public institutions, one of the original justifications for such aid, is no

longer a problem, the State has continued to assist independent institutions to ensure opportunities for qualified California students to choose an institution outside the public realm.

PAST STATE FINANCING

The 1970s opened with Professor Earl Cheit of the University of California, Berkeley, announcing "the New Depression in Higher Education" (1971). He argued that State priorities were shifting, that campus turmoil was eroding public support, and that declining enrollments would be the rule. How accurate were these predictions for California? The combined evidence contradicts Cheit's prediction of a "Depression," at least through most of the decade (for an excellent summary of research at the turn of the decade on higher education finance, see Millett, 1972, pp. 19-26).

First, the State's General Fund expenditures for all government services--the primary source of funds for instruction and administration at the four-year public segments--quadrupled during the 1970s, as the first column of Table 2 shows. More important, expenditures doubled in terms of constant dollars adjusted for inflation (second column). And controlling for both inflation and population growth, per capita expenditures increased by 65.6 percent during the 1970s (third column)--impressive growth by any reasonable standard.

This considerable increase, however, went largely to cover inflation and local fiscal relief, the legacy of Proposition 13, which together accounted for three dollars of every four of additional State expenditures during the 1970s, as Table 3 indicates. New programs or increased levels of government services received only one dollar in six. Even so, the growth of General Fund expenditures suggests that State-supported programs continue to be relatively well financed.

The public segments appear to have shared in this growth. Figure 1 displays State General Fund support for their current operations during the 1970s. After two years without cost-of-living increases for salaries in 1970 and 1971, the four-year segments received substantial increases until 1978, when the State's retrenchment after Proposition 13 slowed the rate of the increases. The Figure indicates, however, that both the University and the State University recovered substantially in 1979-80, primarily because of a 14.5 percent cost-of-living increase for salaries.

State General Funds for the Community Colleges grew dramatically because of changes in State law. The increase in 1973-74 reflects

TABLE 2

THE GROWTH OF STATE GENERAL FUND EXPENDITURES
1970-71 TO 1980-81

Fiscal Year	Current Dollars	Constant Dollars[a]	Constant Dollars Per Capita[b]
1970-71	$4,853,900,000	$4,853,900,000	$241
1980-81	$20,474,800,000	$9,281,400,000	$399

a. Constant dollar amounts reflect current dollar amounts converted to a 1970-71 base using the Implicit Gross National Price Deflator for State and Local Purchases of Goods and Services.

b. Constant Dollars per capita reflects constant dollars adjusted for population growth in California.

Source: Office of the Legislative Analyst, 1980a, p. 3.

TABLE 3

SOURCES OF GROWTH OF STATE EXPENDITURES
1970-71 TO 1980-81

	Inflation	Population Growth[a]	Local Fiscal Relief	New Programs or Increased Levels of Service	Total
Amount	$5.8 Billion	$1.7 Billion	$5.5 Billion	$2.6 Billion	$15.6 Billion
Percent Increase	37.3%	10.6%	35.2%	16.7%	100.0%

a. This includes the extra funds needed to maintain the same level of per capita expenditures for additional population, in other words the effect of inflation on expenditures for new Californians.

Source: Office of the Legislative Analyst, 1980a, pp. 8-10.

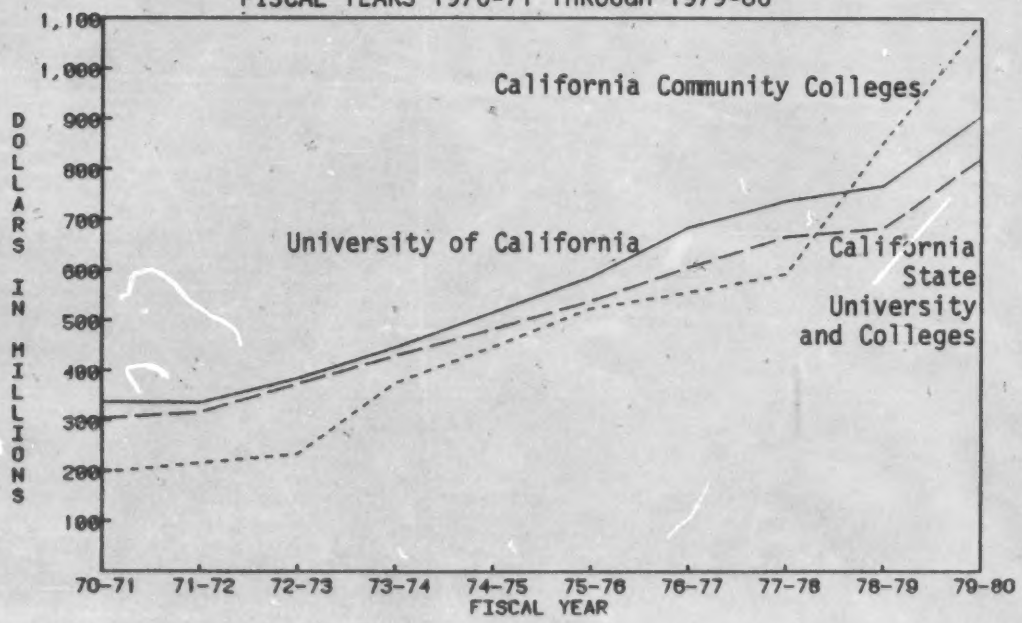
the policy of Senate Bill 6 (1973), to provide local property tax relief. The large increase in State funds after 1978 came as a "bail-out," which replaced property tax revenues lost under Proposition 13 with funds from the State's budget surplus. Although General Fund support increased for the Community Colleges, that segment fell behind the others in terms of total revenue increases.

What do these patterns in the growth of State support mean when considered in terms of inflation? First, regarding the percentage increase in <u>total dollars</u>, the growth in State support for the three public segments during the 1970s was remarkably similar (Table 4). Second, in terms of overall State support, no segment appears to have fallen behind the rate of inflation, even considering its enrollment growth, due to increases provided prior to 1978, when segmental resources were growing and inflation was relatively low.

Because the State transferred so much of its General Funds to replace property tax revenues lost under Proposition 13, it is necessary to analyze both State expenditures <u>and</u> property taxes

FIGURE 1

STATE GENERAL FUND SUPPORT FOR CURRENT OPERATIONS FOR THE UNIVERSITY OF CALIFORNIA, THE CALIFORNIA STATE UNIVERSITY AND COLLEGES, AND THE CALIFORNIA COMMUNITY COLLEGES, FISCAL YEARS 1970-71 THROUGH 1979-80



SOURCE: CALIFORNIA POSTSECONDARY EDUCATION COMMISSION, 1981h, p. 22.

before reaching conclusions about the State's fiscal circumstances during the 1970s. With this perspective, a much different picture emerges.

In terms of total revenues available to the State of California and its local entities from non-federal tax sources during the 1970s per $1,000 personal income (the standard measure for comparing revenues among states in order to rid the comparisons of the effects of population change and inflation), Proposition 13 and other tax relief had a drastic effect on public finance in California. For example, as Table 5 shows, California enjoyed high tax revenues compared to the national average in 1977-78 when it ranked fourth among the 50 states in terms of tax revenues per $1,000 personal income. But it fell to twenty-second the year after Proposition 13, and climbed back to seventeenth in 1979-80. From another perspective, California's tax revenues were 27 percent above the national norm in 1977-78 and 1 percent above in 1978-79. On the other hand, California's expenditures per $1,000 personal income fell from $211 in 1977-78 to $189 in 1978-79, or by 11 percent. In relation to the national norm, California's expenditures were 10 percent above in 1977-78 and 1 percent below thereafter (Jamison, 1981).

TABLE 4

CHANGES IN ENROLLMENTS AND STATE GENERAL FUND SUPPORT COMPARED TO SELECTED MEASURES OF INFLATION

Segment	Full-Time Equivalent Student Enrollment 1970-71 to 1979-80	State General Funds 1970-71 to 1979-80	HEPI	PCEI	CPI
Univ. of California	+21.5%	+ 169%			
California State Univ. & Colleges	+14.1%	+ 169%	+79%	+77%	+80%
California Community Colleges	+29.5%	+ 436%[a] +(163%)[b]			

a. Actual percentage increase in State General Funds for apportionments, EOPS, and services for disabled students.

b. Percentage increase in State General Funds plus property tax revenues.

Source: California Postsecondary Education Commission, 1981b, p. 23.

No doubt, this is a sharp decline in real revenues and expenditures. Within this decline, how did the institutions of higher education fare? Table 6 shows expenditures for various State services, expressed as a percentage of national norms from 1975 through 1979. It is evident that expenditures for higher education per $1,000 of personal income fell substantially--by 30 percent in 1978-79--when compared to the national average. Further, Table 6 indicates that expenditures for higher education, while well favored compared to the relationship of most other government services to their national norms, showed the sharpest decline of any service in 1978-79 compared to national norms for the funding of each service. That

TABLE 5

TOTAL STATE AND LOCAL TAX REVENUES
1970-71 TO 1979-80

Fiscal Year	Total State & Local Tax Revenues[a]	Tax Revenues Per Capita	Tax Revenues per $1,000 Personal Income[b]	Tax Revenues Per $1,000 Personal Income, Compared to U.S. Average (U.S.=100)
1970-71	$12,199,000,000	$ 601.71	$137.76	117.3%
1971-72	14,063,800,000	688.86	149.29	119.4
1972-73	15,221,600,000	737.48	148.45	116.8
1973-74	15,936,300,000	763.38	141.48	115.0
1974-75	18,401,600,000	868.08	146.53	121.7
1975-76	20,749,500,000	964.11	148.76	121.3
1976-77	23,842,900,000	1,089.36	153.25	122.8
1977-78	27,365,200,000	1,226.37	156.78	127.2
		Proposition 13, June 6, 1978		
1978-79	24,007,300,000	1,057.87	120.89	100.9
1979-80	(est.)27,292,000,000 (est.)	1,181.98	119.69	103.9

a. Total tax collections of all state and local entities in California, as tabulated by the Bureau of the Census, U.S. Department of Commerce. Does not include fees, charges, fines, interest earnings, or revenue sharing or other funds received from the federal government.

b. Total income received by all residents of California, as estimated by the Bureau of Economic Analysis, U.S. Department of Commerce. Personal Income includes wages and salaries, other labor income, dividends, interest, net income from unincorporated businesses, net rental income, government and business transfer payments to individuals. Figures show calendar years ending in the middle of each fiscal year.

Source: Jamison, 1981.

year, California ranked thirty-fourth among the states in expenditures for higher education per $1,000 personal income, compared to being ninth in 1970 (Jamison, 1981; Academy for Educational Development, 1973, p. 90). Public schools in California (Kindergarten through 12th grade) enjoyed a less favored position than higher education before Proposition 13. In terms of revenues per pupil, they ranked 20th in the nation and 22nd in expenditures per pupil. Thus, the public schools did not have as far to fall in comparative terms as did the institutions of higher education. (See Division of Agricultural Sciences, 1980, pp. 2-3.)

Does this mean that, during the crisis, State government assigned a lower priority to higher education than to other services? This appears to be the case, but only from the perspective of comparisons to national norms. From another perspective, Figure 2 shows the percentage of State and local funds which the segments received during the 1970s as a percentage of total State General Fund expenditures plus total property tax revenues. Except for adjustments

TABLE 6

CALIFORNIA'S EXPENDITURE OF STATE AND LOCAL GOVERNMENT FOR VARIOUS ACTIVITIES EXPRESSED AS A PERCENTAGE OF THE U.S. AVERAGE EXPENDITURE PER $1,000 PERSONAL INCOME FOR THOSE ACTIVITIES 1975-76 TO 1978-79

Fiscal Year	Local Schools	Institutions of Higher Education[a]	Public Welfare	Health & Hospitals	Highways	Police and Fire	Financial Admin. & General Control[b]
1975-76	103.8%	125.5%	136.4%	99.7%	59.8%	132.1%	135.3%
1976-77	101.5%	128.1%	138.0%	91.1%	54.6%	129.4%	131.5%
1977-78	103.7%	135.1%	144.8%	96.6%	59.9%	127.7%	130.7%
			Proposition 13, June 6, 1978				
1978-79	92.3%	103.5%	135.7%	95.6%	51.0%	120.5%	114.0%

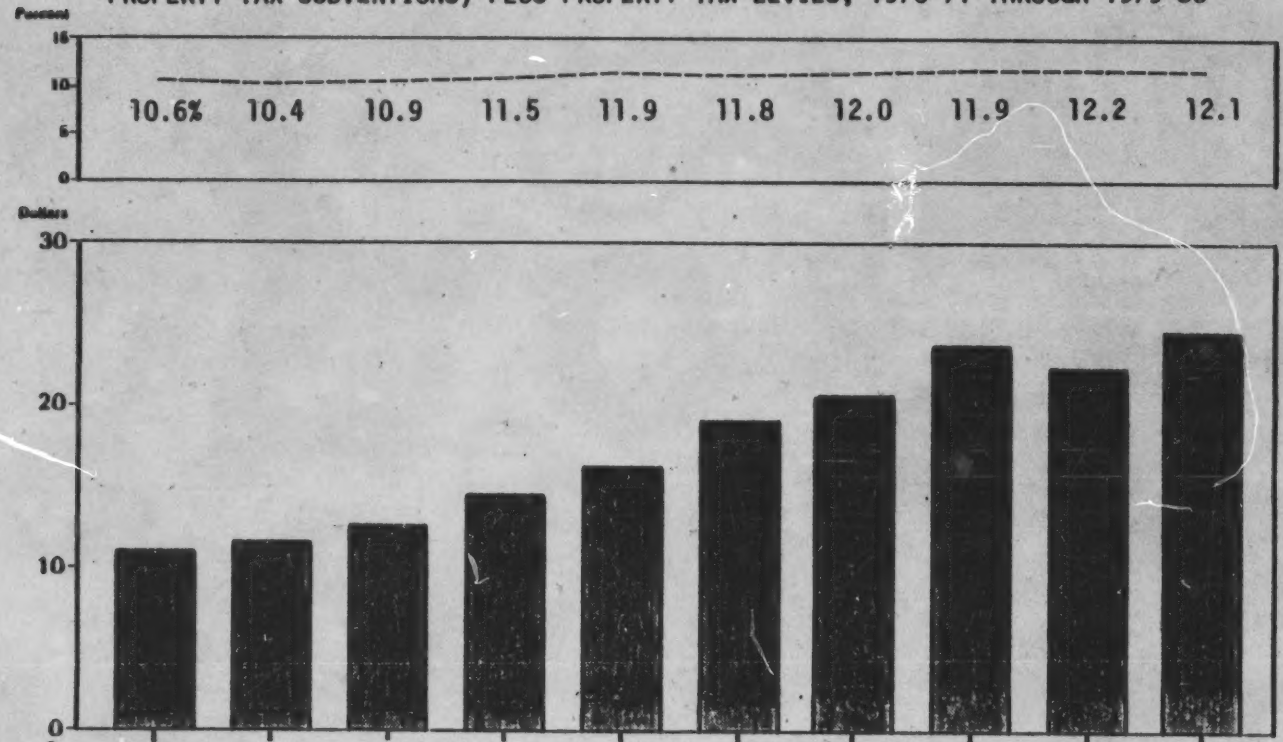
a. Publicly-operated universities, colleges, junior colleges, and other schools beyond the high school level.

b. "General control" covers legislative bodies, administration of justice (including the courts), and governmental chief executives and central staff agencies, other than thos concerned primarily with finances.

Source: Jamison, 1981.

FIGURE 2

SUPPORT FOR CURRENT OPERATIONS OF THE PUBLIC SEGMENTS IN MILLIONS OF DOLLARS AND EXPRESSED AS A PERCENTAGE OF TOTAL STATE GENERAL FUND EXPENDITURES (INCLUDING PROPERTY TAX SUBVENTIONS) PLUS PROPERTY TAX LEVIES, 1970-71 THROUGH 1979-80



Fiscal Year[a]	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
State Dollars[b]	$10,576	11,399	12,435	13,944	15,721	17,797	19,835	22,224	21,287	24,195
Segment Dollars[b]	$1,123	1,182	1,351	1,608	1,865	2,102	2,385	2,653	2,603	2,930

a. July 1 - June 30
b. In millions
Source: California Governor's Budgets and California Legislative Analyst's Reports

early in the 1970s caused by a salary freeze and State efforts to provide property tax relief, the segments as a whole received a remarkably uniform proportion of State and local resources throughout the decade. It also appears that the segments received a slightly larger proportion of State General Funds and property tax revenues in 1978-79, following the rearrangements of Proposition 13.

These two perspectives--one comparing the institutions with those in other states and one comparing them to other State services--suggest that public higher education in California was well supported before 1978-79, in comparison to institutions in other states. As part of the general retrenchment after Proposition 13, however, California's institutions suffered a substantial decline in relation to their counterparts elsewhere. Nevertheless, they did not lose their traditional share of State and local revenues in the competition among services within California.

THE FUTURE OF STATE FINANCING FOR HIGHER EDUCATION

Apparently, California did not reduce proportional support for higher education in recent years, compared to other State services, although the "Tax Revolt" lowered its level of support compared to other states. In view of this, is it reasonable to expect this trend to continue?

The general support levels for higher education by the State are a function of the State's ability and willingness, through the political process, to support the institutions of higher education. Therefore, it is appropriate to ask, will the State have the ability, and will it be willing, to continue support of higher education at past levels?

Ability of the State to Continue Support

The "Tax Revolt" in California embraced more than Proposition 13. From 1975-76 through 1981-82, nearly $44 billion will have been reduced from State and local tax payments because of a variety of measures. Table 7 displays this tax relief to the public.

The continuing effect of taxpayer relief on State revenues is uncertain, but is greatly influenced by the strength of California's economy. In this regard, most economists are predicting substantial employment growth and a recovery of the housing industry through 1983. Perhaps the most notable among the economic oracles for California, the UCLA Business Forecast, predicts that California's

Gross State Product will increase by 14.8 percent and 15.1 percent for 1982 and 1983 respectively, and that personal income will substantially exceed a falling rate of inflation during those years (Kimball and Jaquette, 1981, pp. 110-113). Although unlikely to be as impressive as California's boom during the mid-seventies, the economy should sustain a growth in State General Fund revenues in excess of 10 percent for the next few years.

Of course, experts disagree over the actual magnitude of revenues, as Table 8 indicates. However, even the most pessimistic alternative before the start of the fiscal year called the "slow growth" variation by the Commission on State Finance, projects a 10.9 percent General Fund increase for revenues in 1981-82 (Commission on State Finance, 1981, p. 22). Recent estimates, however, suggest lower increases.

TABLE 7

TOTAL TAX RELIEF PROVIDED BETWEEN FISCAL YEARS 1975-76 AND 1981-82

Tax	Total Amount of Tax Relief 1975-76 to 1981-82
PROPERTY TAX RELIEF	
Proposition 13 (constitutional)	$28,000,000,000
Homeowner's Exemption from Property Taxes (constitutional and statutory)	3,610,000,000
Business Inventory Exemption (statutory)	2,650,000,000
Open Space (Williamson Act, statutory)	110,000,000
Total, Property Tax Relief	$34,370,000,000
RELIEF FROM STATE TAXES	
Personal Income Tax	
Indexing of Income Tax Brackets (statutory)	$ 5,058,000,000
Other (statutory, one-time payment in 1978-79)	1,055,000,000
Renter's Credit (statutory)	1,760,000,000
Senior Citizens Credit (statutory)	510,000,000
Business Taxes (statutory)	290,000,000
Inheritance and Gift Taxes (statutory)	145,000,000
Energy Credits	165,000,000
Other	550,000,000
Total, Relief from State Taxes	$ 9,533,000,000
TOTAL, TAXPAYER RELIEF	$43,903,000,000

Source: 1981-82 Governor's Budget, State of California, p. A-51.

These assumptions, of course, presume that the State's ability to raise and spend revenues will not be restricted by voter initiatives. We should consider two developments along these lines: Proposition 4, which is a part of the Constitution, and possible measures in the future, which could become part.

Proposition 4: In November 1979, California voters overwhelmingly approved Proposition 4, the "Spirit of 13" initiative, which placed three provisions into California's Constitution:

1. A limit on the year-to-year growth in tax supported appropriations of the State and individual local governments and school districts;

TABLE 8

ACTUAL AND PROJECTED STATE GENERAL FUND REVENUES
1977-78 THROUGH 1982-83

Fiscal Year	Totals, General Fund Revenues & Transfers	Percent Change
1977-78	$13,695,000,000[a]	
1978-79	15,219,000,000[a]	+11.1%
1979-80	17,985,000,000[a]	+18.2%
1980-81 (est.)	18,934,000,000[b]	+ 5.2%
1981-82 Legislative Analyst (February, 1981)	21,020,000,000[a]	+11.2%
Department of Finance (May, 1981)	21,582,000,000[b]	+14.0%
Commission on State Finance (June, 1981)	21,465,000,000[b]	+13.4%
1982-83 Commission on State Finance (June, 1981)	24,779,000,000[b]	+15.4%

a. Office of the Legislative Analyst, 1981a, p. A-19.

b. Commission on State Finance, 1981, p. 21.

2. A prohibition against the State and local governments retaining surplus funds; and

3. A requirement for the State to reimburse local entities for the cost of certain State mandates.

In 1980-81, the Department of Finance estimates that the State is $810 million below its appropriations limit and that it will fall $1.79 billion below the limit in 1981-82. The Legislative Analyst concludes "that the State's appropriation limit will not be a fiscal constraint in 1981-82, and, barring the enactment of a general tax increase, it will probably not be a constraint in the foreseeable future" (Office of the Legislative Analyst, 1981b, pp. 4, 14).

Possible Future Measures to Limit Government: The opinion prevailed after Proposition 13 that it was the first of many such efforts and would cripple governments throughout the nation. Evidence now suggests otherwise; the "Tax Revolt" appears more moderate and selective. In order to test the strength of the revolt, the Education Commission of the States analyzed voter referenda in four states. The Commission concluded that the revolt was not a "monolithic movement that is sweeping the country." Rather, voters appeared to perceive the differences in the tax and expenditure limitations on the ballot and acted with considerable caution (Education Commission of the States, 1980, p. 57; Kintzer, 1980, p. 3). A poll conducted by NBC and the Associated Press in May 1981, showed that only 33 percent of Westerners polled believed their property taxes were too high, compared to 74 percent in 1978. Even more conclusive are the results from the November 1980 elections:

- Of the 10 "Tax Revolt" propositions (7 major property tax reductions and 3 expenditure limitations), only two passed (Massachusetts' Proposition 2-1/2, and Montana's expenditure limit); and

- Of the 20 propositions with a minor impact on revenues, 11 passed (California Tax Reform Association, 1980, p. 1).

Although it would be naive and premature to announce the end of the Tax Revolt (two propositions have qualified for the ballot in June 1982, which would abolish the State's Inheritance Tax and reduce revenues by $500 million annually), radical measures to restrict the State's fiscal ability appear unlikely to be adopted.

(The Rand Corporation recently summarized the results of various tax and expenditure limitations as follows: increased reliance on user fees; some cutbacks in services, especially redistributive

ones; some reduction in public employment; substantially reduced opportunities for minority employment; erosion of local control; and increased targeting of appropriated funds. See Rand Corporation, 1980.)

Willingness of the State to Continue Support

Predicting the willingness of the State to fund higher education at past levels requires more subjective speculation than assessing the State's ability. In general, three factors influence this willingness:

1. Statutory and constitutional commitments to fund other State activities, such as retirement systems, which will likely enjoy some priority over higher education;

2. The public's image of the institutions as relayed to State officials; and

3. The political acumen and influence of those representing higher education compared to those representing other agencies and groups.

During the 1970s, it appears that the institutions showed considerable strength in each of these areas.

Perhaps public opinion is the most crucial factor for the long run. Although polls reveal sharply different attitudes according to the questions asked, most show that higher education (especially when separated from the public schools) continues to enjoy substantial public support. The ABC News-Harris Survey in 1979 indicated that only TV news enjoyed a higher confidence rating than higher education, among the eleven institutions mentioned. Closer to home, the Field poll recently documented extensive knowledge and interest in the California Community Colleges. The major reservations in public opinion appear to be that all institutions of higher education offer too much remedial work and fail to provide basic skills. (See Carnegie Council on Policy Studies in Higher Education, 1980, p. 23. See also National Center for Education Statistics, 1981b, pp. 43-45, and California Community Colleges, 1979b.)

On the whole, though, some doubt about the ability of higher education to secure its past share appears in order. First, unlike those citizens served by many State agencies, numerous students can afford to pay more for their education and thus relieve the taxpayer to some extent. This opinion was apparent in the Legislature's decision to impose an "unallocated" reduction in the 1981-82 budgets of the University and the State University, with the expectation of their increasing fees.

Second, the final budgets for all three public segments are not statutory; the increases are negotiated annually in the Budget Bill. So, it is easier strategically to change these amounts than to amend a statutory cost-of-living adjustment or to postpone obligations such as retirement funding.

Third, almost 80 percent of the budgets for the four-year segments is represented by salaries. Each year, their single largest increase appears as a line item for salary cost-of-living adjustments. These tend to be decided late in the budget process when revenues and prior commitments are known. Salary increases are therefore used "to balance the budget," and agencies which have a high proportion of their budgets represented by salaries tend to suffer during years of stringency. This practice might change with collective bargaining.

Finally, there is concern in some political circles that higher education has been enriched while the public schools have been starved. "Overall, I believe that we need to recognize that higher education's success in the eighties will depend upon the success of K-12 in preparing students for matriculation," the Director of the Department of Finance has announced. "This will involve a willingness to redirect higher education funding to K-12 . . . ." (Graves, 1980, p. 13).

ISSUES IN POSTSECONDARY FINANCE

Turning from this background about State policies and current fiscal realities to issues in financing postsecondary institutions during the 1980s, there appear to be five areas which will draw most of the State's attention: (1) formulas and funding for the public segments, (2) accountability, (3) sources of revenue, (4) policies for student charges and financial aid, and (5) the role of the State in assisting private institutions. The following paragraphs seek generally to describe the problems rather than prescribe solutions to them.

Formulas and Funding for the Public Segments

A State-level formula gives formal expression to the way a State funds its institutions of postsecondary education. It is a mathematical means of relating the workload of a public institution to its State appropriation. According to Kent Halstead of the National Institute of Education, a formula is "basically a means of projecting present ratios and unit costs to estimate future budgetary requirements" (1979, p. 664). Functionally, statewide formulas are

the bridge between Cost and Workload Analysis (historical information which determines relationships between programs and expenditures) and the State Budget (the document which contains the approved level of expenditure for institutions).

Funding Formulas for the University of California: Excluding the health sciences, only two portions of the University of California's budget are adjusted according to a State formula under this definition: (1) the instruction and departmental research program; and (2) the library reference circulation staff within the Academic Support program. The rest of the State-supported budget consists of items which are "base" funded with increases and enrichments negotiated between the University and the State.

Funding Formulas for the State University: These budgetary formulas are much more complex, indeed some authors have characterized the system as among the most "formula-laden" in the nation (Meisinger, 1976). In general, a basic component (general formula) is established in each program classification for all campuses, with step increases (standard allowances) augmenting this base as the size of the institution increases. Except for physical plant operations, all programs in the State University's classification system are based on enrollments, either on FTE calculations, headcount, or variations of both. It is important to understand, though, that some allotments within the budget are far more sensitive to small changes in enrollment, such as the formula for faculty positions, than are others.

Funding Formulas for the Community Colleges: The formula to support the California Community Colleges is closer to the mode of public school finance, with a general apportionment per unit of attendance being the prime component. The State does provide categorical aid which is not part of the general formula, primarily for the Extended Opportunity Programs and Services and services for students with disabilities.

Formulas in California and elsewhere serve several purposes: they lessen political wrangling among the institutions; they assure some consistency and objectivity; they provide State officials with a few understandable measures; they represent a compromise between State control over line-item budgeting and institucional autonomy. Still, the formulas suffer from some serious defects, seven of which will be increasingly apparent in the 1980s:

1. Funding Enrollment Change by the Average Cost of Instruction: Unlike many states, California does not add or subtract revenues based on the total cost to the institution per student (the cost of all campus activities divided by full-time-equivalent

students). Rather, the State's policy for all three public segments is to fund at the marginal (or incremental) rate: the cost of providing instruction only to the additional student. Even with this approach, there are problems with cost "averaging" for instruction. Recently, many students have moved into vocational, occupational, and professional programs where instructional expenses to the institution are greater than in the humanities or social sciences. Although the State does provide an adjustment based on these discipline considerations for the State University, it does not do so (at their request) for the University or for the Community Colleges. Over the years, substantial changes in enrollment or shifts in student programs can seriously undermine the original basis for the instructional formulas.

2. Formulas Based Only on Inputs Rather Than on Performance: Partly because of academic convention and partly because the alternatives seemed so subjective, funding formulas have been based on how much is done (credits and seat time), not on how well it is done (changes in knowledge, enhanced personal and career development). The typical approach in financing higher education has been for the State to provide the environments and tools for learning with scant emphasis on results--at least not within the regular budget. Although the State has established grants for innovative projects in all three segments, the fundamental assumption in the regular formulas is that funding and quality assessment should be distinct: the State should provide adequate funds while the institutions themselves, through administrative rigor and faculty review, should maintain high levels of performance. Although performance funding has many fundamental and practical problems, as shown in Tennessee's cumbersome experiment (Tennessee Higher Education Commission, 1979), the idea of providing some funds in the budget for results remains hauntingly attractive, especially to those sensitive to the political demand for accountability (for a criticism of the California system, see Balderston, 1974, p. 158).

3. Proliferation of Categorical Programs: State officals almost everywhere are increasingly attracted to categoricals--funds which are provided specifically for certain programs rather than for general support. This is the clear trend in areas such as remedial instruction, innovation, affirmative action, and services for disabled students. This trend is understandable in that officials want to protect and encourage programs of particular interest to the State, especially during times of fiscal stringency. Nevertheless, categorical programs, when they become excessive, can cause problems: they reduce institutional flexibility; they tend to grow much faster than general

funds (this is particularly true for categorical programs in the Community Colleges); they can become protected entities, unresponsive to changing circumstances and priorities; and they tend to consume legislative time in details, and detract from discussions of general policy or educational effectiveness overall.

4. Collective Bargaining: California's experience with bargaining in the Community Colleges does not indicate much effect on the State's formulas or its appropriations, except for the Sonoma decision which prohibited a salary freeze. Within the four-year segments, which are subject to State-level budget review, collective bargaining could alter parts of the formulas, such as student/faculty ratios and workload, since these are subjects for bargaining. If either segment adopts collective bargaining, the formulas will likely be targets for revision.

5. Socially Imposed Costs: All institutions of postsecondary education experience cost increases through informal social pressure, governmental mandate, or litigation. The most important of these costs are as follows:

   - Costs for Personal Security: Unemployment protection, illness, accident, old age, premature death, and protection of privacy;
   - Costs for Work Standards: Minimum wages, hours, working conditions, and collective bargaining;
   - Costs for Personal Opportunity: Access for all persons without discrimination on the basis of sex, race, religion, or physical handicap;
   - Costs for Participation and Due Process: Mandates by government which call for open, equitable decisions with individuals participating in decisions that affect them;
   - Costs for Public Information; and
   - Costs for Environmental Protection (Bowen, 1980, p. 77).

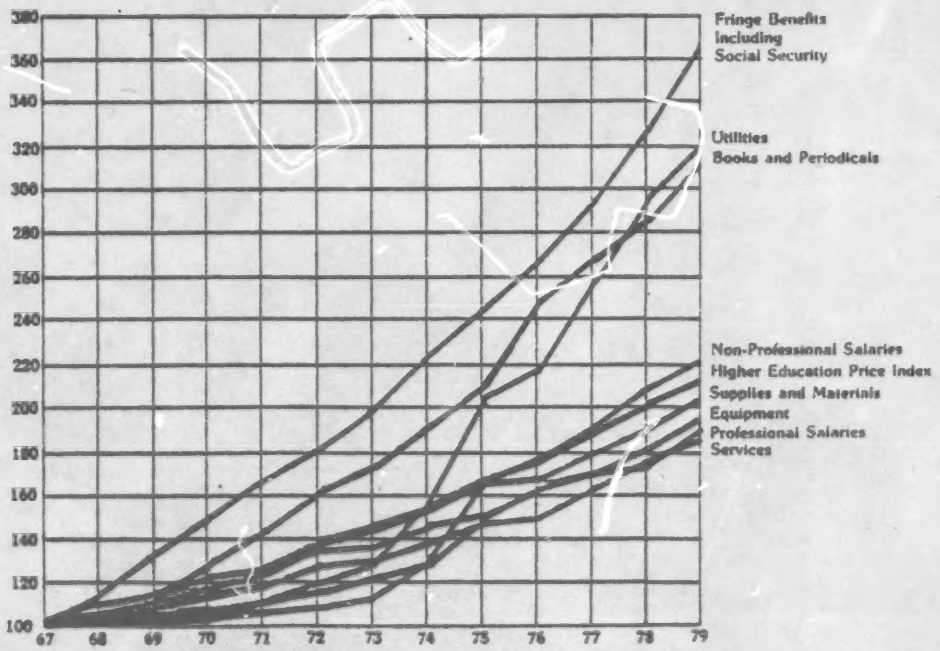
   Although few educators dissent formally from the objectives within these categories, many complain about clumsy administration, arbitrariness, and bureaucratic inefficiency. The most frequent criticism, however, is that some of these costs, estimated by Howard Bowen to be 7 or 8 percent of total current expenditures, are mandated but not funded by government. Recently, both the State University and the Community Colleges were refused special funding to support monitors for affirmative action in order to fulfill legal mandates.

6. The Difficulty of Making Formulas Sensitive to Differential Cost Increases: As shown in Figure 3, costs for the various goods and services purchased by institutions have grown at different rates during the 1970s. In order to be realistic, the formulas must have differential increases for the various items purchased. It is difficult, however, for the State's formulas to reflect this differential growth annually. Often, there are serious arguments even over the proper way to deter-

FIGURE 3

TRENDS IN HIGHER EDUCATION COST COMPONENTS

1967 = 100



Source: Reprint from Carol Frances, 1980, p. 35.

mine increases, the best example being the annual debate on salary adjustments. On the one side, the State through the Postsecondary Education Commission has established a set of comparison institutions for the University and the State University with regard to parity in faculty salaries. On the other side, the segments argue that some cost of living index, notably the Consumer Price Index, is the proper comparison. The State's policy in this regard is equivocal, at best. Faculty have received the same increases as other State employees for the past several years, regardless of their comparison institutions or the cost of living.

7. Deferred Maintenance and Capital Replacement: During the years of enrollment growth and rapid construction, concern about the aging of buildings and equipment drew little attention. Now, capital maintenance is among the most important aspects of finance. Several economists have emphasized the growing linkage between current operations and capital expenditures: "Colleges and universities overall tend to make inadequate provision for 'renewal and replacement' of capital," writes one Vice President for Finance. "As a matter of fact, it can be shown easily that they 'balance their budgets' at the expense of capital 'renewal and replacement'" (Jenny, 1980, p. 3).

   As a matter of policy, the State provides funds for equipment replacement and deferred maintenance to the University ($15 million in 1980-81) and the State University ($6 million in 1980-81). There are no funds provided specifically to the Community Colleges for this purpose; most districts set aside funds from their general revenues. Despite the State's policy, several concerns remain:

   Inadequate Funds: The funds may not be adequate. One author suggests that a "capital consumption rate" of 2 percent in operations funds is necessary (Jenny, 1980, p. 3). Such a policy would require approximately $21 million for the University and $19 million for the State University.

   Ease of Elimination: Deferred maintenance funds are usually among the first casualties during times of fiscal crisis: the University's amount for equipment replacement in the Governor's Budget was cut in half after Proposition 13; and

   Accessibility for Other Uses: The funds, when not earmarked for this purpose by the State, can become a subject for collective bargaining and can be used for purposes other than capital outlay. This is particularly true for the Community Colleges.

Increasing Accountability

The Carnegie Council portrays higher education, including public institutions, as once a largely self-governing and autonomous part of American society that increasingly "has become subject to many forms of regulation and has taken on the status of a regulated industry" (1980, p. 14). Indeed, the use of formulas for higher education bolstered this trend toward more accountability in State budgeting by imposing different management practices, formal cost accounting, and complex budget procedures. As a whole, it appears to many educators that the priority of, and respect for, higher education has declined and that demands for more accountability are pernicious expressions of this sentiment.

An alternative view is that the apparent trend toward increased accountability only represents a desire to impose ordinary practices of State budgeting on institutions of higher education, and is not evidence of hostility to the enterprise itself. Along these lines, many State officials throughout the nation are questioning the perquisites of higher education: tenure, sabbaticals, and fiscal autonomy. They are doing so partly because of what Martin Kramer calls "the professionalization of the allocative function," spawned by the new breed of public administration professionals. For them, "the meat of public administration is competition for resources, and competition, to be rational, must be in terms of characteristics that institutions share" (Kramer, 1980, p. 36). These professionals and like-minded officials believe that the appropriations of government should be determined through a unified process where all programs are arrayed together and priorities are established among them. There should be no protected areas or self-serving concepts about "fair shares." As Kramer describes their attitude, "the wider the scope of trade-off choices--that is the more programs and priorities that are considered in this process--the better the outcome is expected to be" (ibid). In this arena, the celebration of higher education's prerogatives, according to this viewpoint, are just another banal form of special pleading.

Throughout the nation, two concrete examples of increased fiscal accountability for educational institutions are most apparent.

Emphasis on Cost Data, Generally by Discipline: Among all the states, California has been one of the slowest to follow this course. In 1979, however, the Legislative Analyst recommended that the Postsecondary Education Commission "develop comparable costs of (a) instruction, by major disciplines and level of instruction, and (b) support services in the three public segments . . . ." The Analyst argued that comparable cost and staffing factors are basic to "any attempt to interrelate the segments . . . . Much additional information is necessary to assist the Legislature in evaluating

the allocation of State support between the three segments of higher education, the distribution of support within each segment, and the merit of requests for program increases" (Office of the Legislative Analyst, 1979, pp. 1011-1012. From an institutional perspective, see National Association of College and University Business Officers, 1980.) The Commission staff then prepared a Feasibility Study of Alternative Methods for determining the cost of instruction which presented four variations, each of increasing sophistication and expense. The report listed two findings which are particularly relevant to using cost accounting as a means of increasing accountability:

> Functional differences--those attributable to the "personality" of an individual campus--continue to present a major obstacle to cost comparability among campuses. In California, many of these differences were created by the 1960 Master Plan, which established specific differentiation of functions among the public segments. No set of formulas, procedures, or guidelines have been, or likely will be developed in the near future to deal with functional differences between and among institutions.
>
> . . .
>
> Cost-of-instruction data can be an exceedingly valuable, but potentially debilitating, commodity. The possibility for misuse of cost data, and particularly cost-of-instruction data in the forms described in this report, is significant (California Postsecondary Education Commission, 1980c, pp. 62-63).

The Legislature and Governor have received the Commission's report, but have not yet acted on its recommendations.

Demand for Instant and Comparable Information: In California, this effort has assumed the form of the California Fiscal Information System (CFIS). Mandated in 1978, CFIS is the State's vehicle for developing annual budgets, accounting for expenditures, and enhancing "fiscal decision-making in the establishment of budgets for all state activities" by creating measures for comparing costs among all State agencies.

Among other things, the law requires that State agencies and institutions, through CFIS:

- Develop a system permitting immediate comparisons of budgeted expenditures, actual expenditures and encumbrances;

- Use an accounting structure that facilitates the linkage of actual expenditures to specific goals and objectives; and

- Use a coding structure (presumably within the accounting structure) that will permit "identical activities being performed by different entities to be identified and compared" (Government Code, Sections 11409 and 13300).

The statute suggests that all State agencies and institutions are subject to CFIS with the exception of the University of California. Currently, however, only the State University has converted its reporting to the CFIS format.

People within the postsecondary institutions have naturally been hostile toward these trends. Generally, they subscribe to three views:

- The quality and effectiveness of education is seriously jeopardized by fiscal dissection and regimentation;

- The results of education cannot be measured as objectively as those within other government agencies, and so the costs cannot be conclusively linked to benefits; and

- The traditions of higher education--tenure, a departmental budget base, shared responsibility for resource decisions--are central to the institutions and cannot be dismantled without thoroughly reorganizing the institutions (Rourke and Brooks, 1966, pp. 75-76).

The struggle between public administration professionals and the advocates of institutional autonomy will continue during the 1980s, with neither side likely to prevail entirely. Considering this debate, David Adamany, in a recent study of State regulation in California, thoughtfully summarized the challenge of accountability:

> A strong case can be made that intensive state regulation of universities is counter-productive: it costs money, stifles creativity and diversity, defeats effective administration, and, at its extremes, intrudes on academic freedom . . . .
>
> But the other elements necessary to substitute a policy of deregulation for one of ever advancing regulation are only now being developed. Mission statements and evaluation techniques must be devised and adopted that will create sufficient official and public confidence to sustain pleas for a special relationship between universities and state governments, turning on delegated authority and program accountability (1978, pp. 190-191).

Particularly important is Adamany's call for sharper mission statements and evaluation techniques, presumably to be developed by the institutions themselves, which can justify a special relationship between the State and academic institutions. However, recent efforts by the University of California and the California Community Colleges have fallen rather short of this goal--the University's because of resistance within the institution to limiting campus missions, and the Community Colleges' because of State-level suspicions that the proposed procedures would make the districts less accountable to the California taxpayers as a whole (University of California, 1979; Board of Governors, California Community Colleges, 1979).

The Need to Diversify Sources of Revenue

Those who worry professionally about the welfare of postsecondary education have lamented that two sources of revenue--student charges and State appropriations--are coming to dominate institutional support (see, for example, Carnegie Council, 1980, p. 14, and Sloan Commission, 1980, pp. 95-96). Any enterprise is ill-advised to rely excessively on a few sources; multi-purpose institutions are especially so. Moreover, these two sources carry particular danger with their rapid rise. Disproportionate increases in student charges can affect access, foster undue competition, encourage disreputable efforts to retain students, and disrupt the precarious balance between public and private enrollments. As for State appropriations, they are unduly influenced by fluctuations in the economy. According to economist Walter Adams, budget policy is "perversely tied to the business cycle" in that enrollments appear to strengthen during periods of high unemployment at the time when tax revenues grow soft (1977, p. 87). The Louis Harris poll has reported that administrators, trustees, and senior professors, when aware of this increasing reliance on State funds, prefer increased dependence on corporations to government by 72 to 16 percent (Malott, 1978, p. 215).

Several developments have caused this increasing reliance on students and the State for financial support. First, private institutions, which rely to a small degree on direct State aid, have declined in terms of their proportion of enrollments nationwide. Until World War II, these institutions attracted half the students in America. By 1970, their proportion had fallen to 25 percent of all students in higher education, and by 1979 to 21 percent (National Center for Education Statistics, 1981b, pp. 164-165). Second, State appropriations as a percentage of revenues for public institutions increased in virtually every state during the 1970s. This has been especially true in those states, such as California, where the revolt against property taxes, traditionally a source of reve-

nues for Community Colleges, has been the most inflamed. Finally, the changing federal emphasis toward student aid (from $730 million in 1970 to $4.1 billion in 1979) and the converse decline of research and institutional grants has both diminished the federal share of institutional support and encouraged public and private institutions to raise student charges and so capture federal entitlements (Student Financial Aid Policy Study Group, 1980, p. 18; Sloan Commission, 1980, p. 51).

How does California fit into the national patterns? Tables 9 and 10 on pp. 72-73 display the Educational and General Revenues for public and private institutions and a few of the most important sources: student tuition and fees, State government appropriations to institutions, endowment income, and private gifts for general use. Table 9 summarizes these patterns for the United States as a whole and Table 10 presents the corresponding figures for California. We shall analyze the data from two perspectives.

Sources of Support: First, in 1978-79, student tuition and fees as a proportion of revenues for all colleges and universities were much lower in California than in the nation at large (17.0% compared to 26.9%). As could be expected, State appropriations made up part of this difference for public institutions in California (60.7% compared to 56.4% nationally). Both California's and the nation's private institutions were almost equally dependent on student fees (51.5% and 50.3% respectively). California's private institutions received no direct State appropriations compared to other states providing institutional support at 1.7 percent of revenues for private institutions nationwide from State funds directly. This indicates that private institutions elsewhere may use some State appropriations to lower their tuition somewhat. Finally, endowment income and private gifts (excluding financial aid) totaled 9.7 percent of revenues for private institutions in California and 13.8 percent nationally, a significant source of their income. This is a much larger amount from both these sources than is true for public institutions in California and around the nation (.9% each).

Changes in Proportion: Second, changes in the sources of support between 1969-70 and 1978-79 reveal that nationally, tuition and fees remained relatively constant as a source over the decade (26.7% in 1969-70 compared to 26.9% in 1978-79), while in California they increased as a proportion of revenues (14.7% to 17.0%). This increase appears due exclusively to tuition increases among private institutions (42.5% up to 50.3%) while out-of-state tuition and resident fees as a proportion of total revenues remained relatively constant among public institutions during the decade (7.3% to 7.2%). The largest increase among sources of support in California was in State appropriations (47.6% in 1969-70 to 60.7% in 1978-79);

the same trend was evident nationwide as State appropriations increased from 50.6 percent to 56.4 percent during the decade. An important decline in revenues occurred in gifts for private institutions, from 10.0 percent to 7.1 percent in the nation, and from 9.2 percent to 5.0 percent in California.

In sum, the California experience appears to confirm fears that student charges and State appropriations are assuming a preponderant role in postsecondary finance. For the welfare of the institutions, this trend should be halted, no easy challenge.

Certain alternatives do appear on the horizon to reverse this growing dependence. The federal government has recently increased tax incentives for corporate research conducted under university auspices; perhaps more could be justified under the Administration's pledge to promote "re-industrialization." Additionally, Congress might be persuaded to increase indirect cost allowances to support academic functions beyond those directly related to research projects. Further, State appropriations are unlikely to increase at past rates, chiefly becuase the shrinking college-age cohort signals an end to substantial enrollment growth. In the past, new students were funded almost exclusively by the State. Thus, institutions have new incentives, though ones not wholly benign, to solicit funds aggressively from private sources.

Student Charges and Financial Aid

California's policies toward student support of postsecondary institutions are in considerable flux, partly because the State is re-examining its traditions about student charges in public institutions in the wake of fiscal stringency, partly because the State's multiple approaches to providing student aid are being challenged, and partly because federal aid programs are so unstable. Since the impact of student aid on access and its sheer size (see Table 11) are so significant, student support of the institutions--through tuition and fees--is an element of consequence in finance. We shall examine the State's financial policies and the reasons for their current flux.

First, the State's major form of aid for students is through its large subsidy for instruction, called institutional aid, at the three public segments. Due to this support, none of the segments currently charges tuition (defined as payment for the cost of instruction or administration unrelated to student services) to California residents, except for those taking community service or extension courses. Non-residents pay a tuition roughly equal to the cost of instruction in all public segments.

TABLE 9

PROPORTIONS OF EDUCATIONAL AND GENERAL REVENUES REPRESENTED BY SELECTED SOURCES OF INCOME: STUDENT TUITION AND FEES, STATE GOVERNMENT APPROPRIATIONS, ENDOWMENT INCOME AND GIFTS 1969-70 AND 1978-79

United States Total

Revenues	Sector	1969-70 Amounts	1969-70 Proportion	1978-79 Amounts	1978-79 Proportion
Educational & General[a]	Total	$16,593,582,000	100.0%[d]	$40,152,187,000	100.0%[d]
	Public	11,024,817,000	100.0[e]	27,711,323,000	100.0[e]
	Private	5,568,765,000	100.0[f]	12,440,865,000	100.0[f]
Student Tuition & Fees	Total	4,438,486,000	26.7[d]	10,807,210,000	26.9[d]
	Public	1,740,833,000	15.8[e]	4,395,359,000	15.9[e]
	Private	2,697,653,000	48.4[f]	6,411,851,000	51.5[f]
State Government Appropriations to Institutions	Total	5,669,460,000	34.2[d]	15,837,693,000	39.4[d]
	Public	5,583,702,000	50.6[e]	15,632,276,000	56.4[e]
	Private	85,759,000	1.5[f]	205,417,000	1.7[f]
Endowment Income (except student financial aid)[b]	Total	447,329,000	2.7[d]	986,093,000	2.6[d]
	Public	57,084,000	.1[e]	154,092,000	.6[e]
	Private	390,244,000	7.0[f]	832,001,000	6.7[f]
Private Gifts (except student financial aid)[c]	Total	616,867,000	3.7[d]	970,656,000	2.4[d]
	Public	58,340,000	.1[e]	89,033,000	.3[e]
	Private	558,527,000	10.0[f]	881,623,000	7.1[f]

a. Changes in the format for presenting fiscal information between 1969-70 and 1978-79 require that Educational and General expenditures in the latter year be used as a surrogate for Educational and General revenues which are reported in the earlier year.

b. "Endowment income" (except student aid) is reported for 1969-70 while "Unrestricted Endowment Income" is reported for 1978-79, due to changes in the format for collecting the fiscal information. Instructions in the Survey Form indicate that these can be considered roughly equivalent.

c. "Private gifts" (except student aid) is reported for 1969-70 while "Unrestricted Private Gifts, Grants and Contracts" is reported for 1978-79, due to changes in the format for collecting the fiscal information. Instructions in the Survey Form indicate that these can be considered roughly equivalent.

d. This is the proportion of the total Educational and General Revenues represented by this source of income.

e. This is the proportion of the total Educational and General Revenues for public institutions represented by this source of income.

f. This is the proportion of total Educational and General Revenues for private institutions represented by this source of income.

Sources: National Center for Education Statistics, 1973, p. 12.
National Center for Education Statistics, 1981a, p. 12.

TABLE 10

PROPORTIONS OF EDUCATIONAL AND GENERAL REVENUES REPRESENTED BY SELECTED SOURCES OF INCOME: STUDENT TUITION AND FEES, STATE GOVERNMENT APPROPRIATIONS, ENDOWMENT INCOME AND GIFTS 1969-70 AND 1978-79

California

Revenues	Sector	1969-70 Amounts	1969-70 Proportion	1978-79 Amounts	1978-79 Proportion
Educational & General[a]	Total	$1,910,446,000	100.0%[d]	$4,749,993,000	100.0%[d]
	Public	1,519,316,000	100.0[e]	3,674,935,000	100.0[e]
	Private	391,129,000	100.0[f]	1,075,058,000	100.0[f]
Student Tuition & Fees	Total	276,254,000	14.7[d]	805,147,000	17.0[d]
	Public	108,382,000	7.3[e]	264,149,000	7.2[e]
	Private	167,872,000	42.9[f]	540,998,000	50.3[f]
State Government Appropriations to Institutions	Total	723,855,000	37.9[d]	2,229,381,000	46.9[d]
	Public	723,855,000	47.6[e]	2,229,381,000	60.7[e]
	Private	0	0.0[f]	0	0.0[f]
Endowment Income (except student financial aid)[b]	Total	28,981,000	1.5[d]	74,305,000	1.6[d]
	Public	7,326,000	0.5[e]	23,296,000	.6[e]
	Private	21,655,000	5.5[f]	50,609,000	4.7[f]
Private Gifts (except student financial aid)[c]	Total	42,636,000	2.2[d]	62,226,000	1.3[d]
	Public	6,726,000	0.4[e]	9,459,000	.3[e]
	Private	35,910,000	9.2[f]	53,767,000	5.0[f]

a. Changes in the format for presenting fiscal information between 1969-70 and 1978-79 require that Educational and General expenditures in the latter year be used as a surrogate for Educational and General revenues which are reported in the earlier year.

b. "Endowment income" (except student aid) is reported for 1969-70 while "Unrestricted Endowment Income" is reported for 1978-79, due to changes in the format for collecting the fiscal information. Instructions in the Survey Form indicate that these can be considered roughly equivalent.

c. "Private Gifts" (except student aid) is reported for 1969-70 while "Unrestricted Private Gifts, Grants and Contracts" is reported for 1978-79, due to changes in the format for collecting the fiscal information. Instructions in the Survey Form indicate that these can be considered roughly equivalent.

d. This is the proportion of the total Educational and General Revenues represented by this source of income.

e. This is the proportion of total Educational and General Revenues for public institutions represented by this source of income.

f. This is the proportion of total Educational and General Revenues for private institutions represented by this source of income.

Sources: National Center for Education Statistics, 1973, p. 24.
National Center for Education Statistics, 1981a, p. 124.

TABLE 11

STUDENT FINANCIAL AID IN CALIFORNIA, 1979-80

Source	Dollars, 1979-80		Proportion of Total Aid
FEDERAL			
Major Aid Programs [a]	$347,071,000		
All Other Programs [b]	521,927,000		
Total		$868,998,000	58.9%
STATE (as a direct source)			
Cal Grant A	$ 50,097,000		
Cal Grant B	18,506,000		
Cal Grant C	2,475,000		
Graduate Fellowships	2,698,000		
Vocational Rehabilitation Training Funds	36,422,000		
All Other Sources	3,013,000		
Total		$113,211,000	7.7%
STATE (through the institutions or sources within public institutions)			
UC Institutional Scholarships	$ 17,658,000		
UC Institutional Grants	10,184,000		
CSUC Educational Opportunity Program (grants)	6,826,000		
CCC Extended Opportunity Program and Services (grants)	9,297,000		
All Other Sources	99,975,000		
Total		$143,940,000	9.7%
PRIVATE			
Federally Insured Loans	$225,000,000		
Other Loans and College Work Study	22,075,000		
Public Institutions	24,980,000		
Private Institutions	77,555,000		
Total		$349,610,000	23.7%
TOTAL AID IN CALIFORNIA INSTITUTIONS, 1979-80		$1,475,859,000	100.0%

a. Includes Basic Educational Opportunity Grants, Supplemental Educational Opportunity Grants, National Direct Student Loans, College Work Study (from federal sources), and Supplemental State Incentive Grants.

b. Includes numerous other programs, such as Veterans' benefits, Social Security Education Benefits, federally insured/guaranteed student loan subsidies, and National Merit Scholarships.

Sources: For the major aid programs of the Federal Government, Gladieux and Others, 1980, p. 20. For all other information, Student Financial Aid Policy Study Group, 1980, pp. 4-5.

The "no tuition" policy, however, is more apparent than real, at least within the four-year segments. The University of California now imposes a Registration Fee, an Educational Fee, and Student Activity Fees which together average about $1,000 a year per student. The State University charges a Student Services Fee and a Student Activities Fee, but their level--approximately $240 per full-time student in 1981-82--is substantially less than the fee levels at the University. Community College districts are authorized to charge a variety of incidental fees, which rarely exceed $40 a year per student. Thus, the State subsidizes instruction heavily, while most students able to pay are expected to bear most expenses for student services, except those attending Community Colleges.

Second, the State greatly expanded its financial aid efforts during the 1970s to promote access for needy students and allow them to choose among a range of institutions. Total State funding for the three Cal Grant programs increased more than five fold between 1970 and 1979, but growth has slowed since the fiscal crisis induced by Proposition 13.

Third, the State has fashioned several programs with special purposes. Originally designed primarily for students attending independent colleges, the State financial aid programs have proliferated to serve other target groups and certain vocational students. According to a recent report commissioned by the Legislature, the current array of State programs resulted from "the uncoordinated growth and overlap of student aid programs . . . . [Many] programs [are] too small to be known to the full universe of eligible applicants and increase counseling difficulties" (Student Financial Aid Policy Study Group, 1980, pp. 27, 30). This ad hoc approach is natural since the Legislature, over the years, has attempted to concentrate its resources in areas of special concern. One result has been to erode the share of total Cal Grant funds and awards to students attending independent colleges and universities although total student aid funds received by students at independent institutions has increased at a rate greater than funds received by students in the public segments.

Fourth, the State has taken account of the rapid increase of federal student aid during the 1970s, without question Washington's major contribution to postsecondary education. In 1975, the Legislature established the policy that state aid funds should supplement, not supplant, federal funds. Although a sensible approach, the practical problems of implementing this strategy have proven troublesome.

These policies are now being reviewed because circumstances are so different from those earlier. The following issues are the controversies most often debated:

1. What Activities Within Educational Institutions Should be Paid for by Students? Recent research confirms that low student charges are an effective strategy to promote access to postsecondary education (Nelson, 1978; Stampen, 1980, pp. 23-36). Nevertheless, California's tradition that students should not pay any of the direct costs of instruction is unusual in the nation. Some argue that, since personal benefits accrue from instruction (especially in the enhanced earning potential within professions such as medicine), students should assume some portion of their instructional cost. Furthermore, the high level of fees at the University, half of which are used for financial aid, raise the issue of where "fees" become defacto "tuition" since State funds are being effectively replaced by student monies, even though these monies are not being used to cover directly a portion of instructional costs.

2. How Should Student Charges be Adjusted Annually? After several years of development, the University and the State University established an annual mechanism to adjust their fees. For the 1981-82 budget, the Legislature imposed a reduction on these segments which, in effect, increased fees beyond the levels indicated in the agreed-upon formulas. Of course, this disrupted their regular pattern of fee adjustment. Moreover, the spread in annual charges is increasing among the segments, from zero at the Community Colleges to $1,000 at the University. The gap in fees for full-time resident students between the Community Colleges and the State University increased from a maximum of $219 in 1980-81 to $270 in 1981-82, while the gap between University and State University fees increased from $550 to $700. If this spread continues to increase at a compound rate each year, enrollment shifts among the segments are likely. The State's policies on fee levels will need to deal with this spread.

3. Will the State Replace Federal Aid Lost Because of Budget Cuts? Federal programs will be reduced in 1981-82, especially for middle-income students. Despite its policy of "supplementing, not supplanting federal dollars," the State will be under pressure to replace some of these federal funds, if only because this policy did not anticipate such federal reductions.

4. Will the State Adopt Some Fundamental Reforms in Its Approach to Student Aid? For years, the State financial aid programs grew without a comprehensive scrutiny or review. In recognizing this, the 1978 Legislature created a Policy Study Group to study ways to best fulfill the purposes of financial aid, to determine the appropriate level of funding and methods of distribution, to clarify the responsibilities of federal, State, institutional and private agencies for funding, and to

implement the partnership (including students) responsible for funding institutions in California. The Group adopted 34 recommendations, with three areas most important:

- The consolidation of the major State programs into a new Cal Grant program;
- The strengthening of "outreach" efforts to afford greater opportunity in postsecondary education to more low-income and minority students; and
- An expanded role for the California Student Aid Commission as the provider of policy research and advice to the Legislature concerning student financial aid and as the major forum for debate over changes in aid policy (Student Financial Aid Policy Study Group, 1980, transmittal letter).

The consolidation of the Cal Grant programs would depart from the State's tradition of targeting its programs for particular groups, and is certain to be resisted by those groups which receive the benefits as their statutory prerogative.

The Role of the State in Financing Private Institutions

California has an extensive array of independent degree-granting colleges and universities as well as large numbers of private vocational schools which offer certificate programs. The Master Plan of 1960 explicitly supported State aid for these institutions on three grounds:

- Public institutions would be growing rapidly and excess capacity within the independent sector could save capital costs;
- Qualified needy students should have the opportunity, at public expense, to attend a high tuition institution if they qualified; and
- The State should contract for special services which were not available within public institutions.

As described earlier, the State implemented this policy through student financial aid programs and contracts, chiefly for medical services and training.

In 1975, the Legislature directed the Postsecondary Education Commission to conduct a comprehensive study of independent institutions, with special emphasis on assessing their financial condition.

Using data for 68 degree-granting colleges and universities for the 1973 and 1975 fiscal years, the Commission report reached the following conclusions:

> While there is some evidence of institutional weakness and potential deterioration, the majority of California's independent colleges and universities seem to be in relatively stable financial health, with revenues increasing faster than expenditures. This financial health, which is partially the result of growing State and federal programs of student aid, cover the range of independent institutions.
>
> . . . .
>
> While there is little evidence of a major retrenchment within the independent sector in faculty staffing, there is considerable evidence of tight budgets and steady financial erosion, as indicated by the restraint in faculty salary increases and by the cutback in other nonacademic staff. . . . This trend is particularly true for the small Liberal Arts Colleges with enrollments under 1,000.
>
> . . . .
>
> The State's student-assistance programs, particularly its [Cal Grant A] program, are of vital importance to the independent sector. These programs have been successful in achieving the dual objectives of (1) providing the necessary financial assistance so that capable students with demonstrated need have the ability to choose the most appropriate postsecondary educational opportunity, and (2) providing assistance to individuals who desire to enroll in an independent college or university (California Postsecondary Education Commission, 1978c, pp. 2-3).

How accurate is this assessment for these colleges as they enter the 1980s? Without data comparable to those in the Commission's earlier study, no firm conclusions are warranted, but certain evidence suggests that, in some cases, their fiscal situation has deteriorated. Nationwide, the National Center for Education Statistics predicts that 200 small private liberal arts colleges may close in the 1980s, some of which are likely to be in California (Immaculate Heart in Los Angeles and Lone Mountain in San Francisco have already closed their doors). Since the budgets of independent institutions are extremely sensitive to enrollment changes because of heavy reliance on tuition as their major source of income, even small declines in the number of students can pressure institutions

into serious retrenchment (Knudsen, 1980). Several California institutions appear to be on this critical edge: data from 32 members of the Association of Independent California Colleges and Universities show a very small increase (4%) in full-time matriculations among freshmen between 1977 and 1980, and a 3 percent decline in the number of transfer students during those years (Odell and Thelin, 1980, p. 43). In spite of the increase in freshmen, the number of new Cal Grant recipients has declined by 20.3 percent among independent institutions during the past three years which, given large increases in federal aid and loans, does not necessarily mean that their students are suffering disproportionately. It does suggest, however, that the trend of State aid coupled with federal reductions could impair the ability of some students at independent institutions to pay tuition increases. Coupled with the pervasive pressures of high inflation, these trends are ominous for the fiscal health and vitality of the independent sector.

Even if the State believed there were compelling reasons to assist private institutions at the time of the Master Plan, have circumstances changed enough to justify scaling back that commitment? A draft report by the Department of Finance in 1978 argued that two of the three original purposes of aid were moot: public institutions now had excess capacity and contracts were unconstitutional. Further, the report concluded that the Cal Grant A awards to students at independent institutions "is not cost effective in comparison to the public sector cost which would have resulted without the award" (California State Department of Finance 1978). Despite methodological difficulties in measuring "cost-effectiveness" and extensive criticism of the report, its conclusions posed a serious, if narrowly focused challenge to the State's policy of supporting students at independent institutions.

From today's perspective, though, the policy of providing choices for students and indirectly assisting private institutions still appears to be in the State's long-range interests, at least to the extent of current commitments. In addition to reasons previously cited, two have emerged since the Master Plan:

- California provides a small amount of its total investment in postsecondary finance to independent institutions, roughly 2.7 percent of General Fund expenditures in 1978-79. This is much less than in most states wth extensive systems of postsecondary education (Student Financial Aid Policy Study Group, 1980, p. 34; "Aid to Students," 1981, p. 1).

- Independent institutions play a prominent role in equal educational opportunity since many members of racial and ethnic minorities choose to attend them (University of California, 1980, p. 4; California Postsecondary Education Commission, 1977, p. 13).

After reviewing arguments on this issue, the Student Financial Aid Policy Study Group recommended that the State continue its current policies for student financial aid, but cautioned that "state student aid policy should [not] be geared to ensure the survival of every independent college." But where students choose independent colleges, the State should be prepared to assist them if parents and students "make (as they do now) a greater financial effort than they would have, had a public institution been chosen" (p. vii).

Even if current State policy is reaffirmed, several prominent issues remain concerning the State's role in indirectly financing independent institutions:

- Will the State replace federal student aid funds and loan guarantees if these are reduced? These cuts will be most serious for middle-income students attending private institutions.

- Should the State ensure a portion of student aid for non-public institutions? Recent changes to the eligibility ceiling for Cal Grant A were adopted by the Student Aid Commission partly because, it was alleged, the ceiling was interfering with one of the program's purposes: to fund students at independent institutions. Although this is one of the historical purposes of the program, carving out funds for special groups contradicts the spirit of the report of the Student Financial Aid Policy Study Group.

- Should the State refine and clarify its policies for aiding students in private vocational schools? One difficulty is the lack of information about student needs at such schools; the most recent "Institutional Survey of Financial Aid Resources for Students" by the Student Aid Commission does not include credible information on the private vocational sector, even though students receive Commission funds through Cal Grant C. Another problem of coordination is the number of agencies responsible for oversight or financing: the California Department of Employment Development, the California Department of Rehabilitation, and the Office of Private Postsecondary Education. (A recent investigation into the effectiveness of aid to vocational students, prompted by AB 576 [Chapter 1011, 1979], does not provide much guidance in these areas.)

Even if all these controversies are resolved in favor of greater State assistance for private colleges, universities, and schools, current realities of declining numbers of young people and diffi-

culties of the American economy make their futures uncertain. State aid for them is likely to remain a small, though crucial, part of California's overall approach to financing postsecondary education.

CONCLUSION

This essay has described the financing of postsecondary institutions in California during the past 20 years and has speculated on their prospects. It has argued that the State's general policies have not been random or haphazard, changing with different political climates. Rather, the policies for financing the institutions have been powerfully shaped by tenets within California's Master Plan (especially its emphasis on access), by the peculiar nature of educational "costs," and by the State's overall fiscal system. In addition, the public segments as a whole have received a remarkably uniform proportion of State and local resources throughout the past decade. To be sure, California's institutions suffered a substantial decline in revenues compared to their counterparts elsewhere as part of the general retrenchment after Proposition 13, but they have not lost their traditional share of State and local revenues in the competition among services within California. Perhaps the major reason for this consistency has been the State's continuing commitment to certain finance policies for postsecondary education and the established practices for implementing these policies.

California enjoys an enormous, distinguished, and diverse system of postsecondary education which has served the State well and, in turn, been amply supported. As a whole, the State's record of postsecondary finance since the 1960 Master Plan has much to commend it. The troubled 1980s promise to test that record.

CALIFORNIA STUDENT NEEDS AND GOALS IN THE 1980s

The face of California higher education changed markedly during the 1970s, although there was less change than some had hoped for. There were more dark faces, more women, older students, and more students who entered college without the skills which the faculty regarded as necessary for success in college work. The rate of change in such student characteristics and related needs is expected to accelerate during the 1980s, in large part as an outcome of student affirmative action programs mounted in the 1970s, but also as a result of demographic changes in California's population--for example, more ethnic minorities and an older population. The result is likely to be greater diversity of needs, abilities, and goals in what is probably going to be a shrinking student population.

The Commission's 1981 Information Digest provides the data for the snapshot of higher education which appears in Table 1. As can be seen, the percentage of women at the lower division level is larger than that for men in both the Community Colleges and the California State University and Colleges, but smaller in the University of California. At other levels, the percentage of women is higher than that for men only at the graduate level in the State University. Part-time students comprise three-fourths of Community College enrollments but less than 10 percent of the University enrollments; 30-year olds and older students constitute more than one-third of Community College enrollments, but less than 2 percent of the lower division enrollments in the University. Over a recent five-year period, the enrollment of women in California's colleges and universities increased 42 percent, compared with an increase of 10 percent for men. The enrollment of part-time students increased 39 percent, compared with an 8 percent increase in full-time students. Changes in the ethnic composition of California's students are difficult to quantify because of incomplete data.

Table 2, reproduced from College-Going Rates in California: 1979 Update (California Postsecondary Education Commission, 1981a, p. 8), shows the ethnic distribution of California high school graduates in 1979, compared with those of first-time freshmen in the three public segments of California higher education. The table indicates that, with the exception of Hispanic students, ethnic representation among first-time freshmen in the combined public segments is reasonably

TABLE 1
SNAPSHOT OF CALIFORNIA HIGHER EDUCATION, FALL 1980

Variable	University of California	California State University & Colleges	California Community Colleges	Accredited Independent Colleges and Universities	Total
Percent of Opening Enrollment in Each Segment:					
Lower Division	3.9%	7.2%	88.9%	n/a	100.0%
Upper Division	22.9	77.1	0.0	n/a	100.0
All Post-baccalaureate	21.5	37.2	0.0	41.3%	100.0
Percent at Levels Within Segments:					
Lower Division	38.3	30.4	100.0	61.4	81.5
Upper Division	33.2	48.3	0.0		12.1
Master's, Post-baccalaureate	7.2	21.3	0.0	27.3	4.7
Professional	11.5	0.0	0.0	11.3	0.9
Doctorate	9.9	0.0	0.0	*	0.8
Total	100.0	100.0	100.0	100.0	100.0
Percent Men and Women Within Segments:					
Lower Division					
Men	50.2	47.1	45.3	n/a	45.6
Women	49.8	52.9	54.7	n/a	54.4
Upper Division					
Men	53.0	51.2	--	n/a	51.6
Women	47.0	48.8	--	n/a	48.4
Graduate					
Men	63.1	42.2	--	62.2	55.0
Women	36.9	57.8	--	37.8	45.0
Percent Full Time:					
Undergraduate	91.9	71.5	24.9	75.9	39.7
Graduate	95.4	22.0	--	44.4	47.0
Average Age:					
Lower Division					
Men	19.3	20.7	28.5	--	--
Women	19.3	20.8	31.5	--	--
Upper Division					
Men	22.5	25.3	--	--	--
Women	22.9	26.3	--	--	--
Graduate					
Men	28.0	31.0	--	--	--
Women	28.9	32.0	--	--	--
Percent Ethnicity (Undergraduate):					
Black					
Men	2.9%	4.6%	8.2%	4.9%	7.0%
Women	4.4	6.4	8.2	6.2	7.6
Hispanic					
Men	5.8	7.1	10.5	7.0	9.3
Women	5.3	7.0	9.2	7.0	8.5
Asian					
Men	13.0	7.3	6.5	7.1	7.1
Women	12.4	7.0	5.0	6.2	5.8
American Indian					
Men	0.5	1.0	1.4	0.7	1.2
Women	0.5	1.0	1.3	0.7	1.2
White					
Men	67.6	51.8	61.3	67.6	60.7
Women	69.6	57.8	65.7	72.8	64.8
Non-Resident Alien					
Men	2.9	4.5	2.3	11.1	3.5
Women	1.6	1.7	1.5	6.1	1.9
Other/No Response					
Men	7.4	23.8	9.8	1.6	11.2
Women	6.3	22.1	9.1	1.1	10.2
Total					
Men	100.0	100.0	100.0	100.0	100.0
Women	100.0	100.0	100.0	100.0	100.0

*Upper and lower division, and master's and doctorate enrollments were combined in reports from the independent institutions. Therefore, numbers for these institutions have been excluded from the computations in the total column in this portion of the table.

Source: California Postsecondary Education Commission, 1981c.

commensurate with that of recent high school graduates. However, the high school graduation rate of most ethnic minority groups remains below that of whites, and their representation among first-time freshmen differs significantly for the three segments of higher education, with the Community Colleges enrolling the largest percentages of minorities.

Two other groups of potential students whose underrepresentation in higher education has been of particular concern to both the segments and the Legislature during the 1970s are those with disabilities and those beyond the traditional college-going age of 18 to 24.

TABLE 2

ETHNIC DISTRIBUTION OF 1979 GRADUATES OF CALIFORNIA PUBLIC HIGH SCHOOLS AND FIRST-TIME FRESHMEN IN THE UNIVERSITY OF CALIFORNIA, THE CALIFORNIA STATE UNIVERSITY AND COLLEGES, AND THE CALIFORNIA COMMUNITY COLLEGES, BY SEX

		Ethnic Groups*						
Segment	Sex	American Indian	Asian	Filipino	Black	Hispanic	White	Ethnic Data Missing
High School	M	0.7%	4.7%	0.9%	9.0%	15.0%	69.7%	2.6%
	F	0.7	4.5	1.0	9.5	15.0	69.3	2.4
University of California	M	0.3	13.9	1.6	3.3	6.9	74.0	3.8
	F	0.2	13.0	1.9	5.4	5.9	73.6	3.1
California State Univ. & Colleges	M	1.3	8.0	2.0	6.8	11.4	70.5	29.7
	F	1.3	6.9	2.2	10.4	10.6	68.6	30.4
California Community Colleges	M	1.6	4.7	1.3	10.5	12.8	69.1	5.2
	F	1.6	3.6	1.2	10.8	12.9	69.9	4.6
Total:	M	1.5	6.0	1.4	9.3	12.0	69.8	11.7
	F	1.4	5.0	1.4	10.2	11.9	70.1	11.2
UC, CSUC, and CCC	T	1.4	5.5	1.4	9.8	12.0	69.9	11.4

*The sum of the percentages in each row, exclusive of "Ethnic Data Missing," is 100. Thus, the first entry at the top of the table means that American Indian males comprised 0.7 percent of the male high school graduates in 1979. Similarly, the last entry at the bottom of the table means that whites comprised 69.9 percent of the combined group of first-time freshmen in the three public segments of higher education in Fall 1979.

Source: California Postsecondary Education Commission Report 81-3, 1981a.

In the 1970s, institutions responded to the needs of new kinds of students primarily by trying to re-form them into more traditional molds through special programs and services, for example, peer counseling and learning assistance centers, rather than adapting existing programs to their special needs. Disadvantaged students with potential for success were admitted--often in exception to the regular requirements or as special admissions--and then tutored, counseled, remediated, and otherwise nurtured until they were ready for the educational mainstream. Higher education has met with only limited success, however, in attracting and retaining these students through this approach of helping them to adapt to traditional institutions.

Toward the end of the 1970s, colleges and universities began to reach out to disadvantaged students while they were still in junior or senior high school, in an attempt to overcome their special problems before they enrolled as freshmen. Several more years must elapse before the success of this approach can be measured, at least in terms of increased numbers of students from new constituencies who both enroll and persist in higher education.

A major challenge to California colleges and universities in the remainder of the 1980s may be to find additional ways to accommodate the special, changing needs of new kinds of students in addition to helping them adapt to the existing system. Changes may be needed in policies and practices, courses and curricula, modes of instruction, types of student services, and, of course, staffing. Failure of institutions to adapt to new student needs might result in enrollments declining below present projections.

Important changes in the students' role in governance evolved during the past decade which are probably unrelated to the demographic changes which were occurring in the student population. Student participation in governance increased at both the campus and the State levels, with students now serving on the University Board of Regents, the State University Board of Trustees, and the Board of Governors of the Community Colleges. Systemwide student organizations gained new prominence, with student lobbies established in Sacramento to represent student interests in the legislative process and elsewhere in State government. A Student Advisory Committee was created by the Commission which has been effective in giving advice on important issues and recommendations being considered by the Commission. Issues relating to student rights as consumers will continue to be debated in the 1980s. Three areas in which student roles are now being discussed, in at least one segment, are collective bargaining, planning involving the allocation of resources, and faculty evaluation with respect to retention, tenure, and promotion.

The first half of this paper discusses changes in student preparation for college, careers, and graduation, together with the special needs of what were formerly called "nontraditional" students. The second half then turns to institutional obligations in light of these changes.

STUDENT NEEDS AND GOALS

Preparation for College

Most evidence suggests that high school graduates are less well-prepared for college now than they were ten years ago, at least with respect to the basic skills deemed necessary for successful college work. Student scores on high school proficiency tests, college admissions tests, and freshman placement examinations all support faculty opinion that large numbers of today's students lack adequate preparation for college. Contrary evidence may be found in the grades awarded to students in college courses, in that unsatisfactory and failing grades decreased during the 1970s, together with numbers of students dismissed for poor scholarship.

At the same time, today's students are probably more broadly educated than those of a generation ago. A considerable amount of their out-of-school learning takes place through increased opportunities for travel, work outside the home (or off the farm), and some television viewing. Young people tend to mature earlier, with many having had experiences involving the use of drugs and alcohol, sex, rejection of parental guidance and authority, and independence occurring before they leave high school. Many stay out for a year or more between high school and college, often to work or travel. Colleges are thus faced with a paradox of students who are less well-prepared with respect to the basic skills needed for college-level work, but more ready than before for the educational experiences that college can provide.

Collegiate Responses to Poor Preparation: California colleges and universities are responding in at least two ways to the problem of poor preparation in the basic skills. The first is the long-term solution of improving the quality of teaching in the secondary schools by in-service education of teachers, primarily in the California Writing Project. The second and more immediate solution has been for colleges to establish courses and programs to remedy deficiencies in basic skills after students have enrolled, rather than refusing them admission until these deficiencies have been removed. While it was once thought to be primarily a Community College function, remediation is now being given by both the University and the State University to large numbers of their

entering students. The emphasis to date has been on improving writing skills, largely to the exclusion of those in reading, computation, and logic. Students with some deficiencies in basic skills typically take some remedial work while enrolling in regular courses to fill out their freshman course load, and postpone the standard Freshman English Composition course until the completion of remediation. Little information is available about the success or failure of these students, however, either in their other freshman courses or in subsequent years in college.

A glance at the broader question of preparation for college shows that the University requires freshman applicants to complete a specific pattern of academic courses in high school. University staff reviews and approves courses which high schools offer to meet University requirements. Data analyzed in the Commission study in 1976 of the eligibility of high school graduates for freshman admission to the University showed, however, that fewer than one-fourth of the student sample studied had completed the required pattern of subjects. The State University does not require specific preparatory courses in high school, but advises potential students to acquire appropriate preparation for the kinds of programs they plan to pursue. Because they offer very diverse programs, the Community Colleges do not prescribe the kind of preparation potential students should have and may admit high school dropouts, as well as graduates.

Prospects for the Future: It is difficult to predict whether students' preparation for college will improve, remain the same, or decline in the 1980s. It will surely improve among the kinds of students who now constitute the majority enrolled in California colleges and universities, if they benefit from current efforts to improve the high school teaching of writing and related subjects. More students from ethnic minority groups should be able to gain regular admission to the University and State University as a result of student outreach and affirmative action programs. Yet optimism about the future preparation of high school graduates for college must be tempered by projections of demographic changes which show an increasing proportion of non- or limited-English-speaking people in the California population, many of whom have other educational and economic disadvantages beyond language. Improving the preparation of students who now constitute the majority will be relatively simple compared with the larger challenge of helping these minority group members obtain adequate preparation for college.

In addition, under the statute enacted into Chapter 856 of the Education Code, (AB 3408, Hart, 1976), high schools have begun to assess the competencies of their students and withhold diplomas from those who are unable to perform at a satisfactory level, as determined by local school boards, by the time they would graduate.

Districts have established their own programs to assess student competencies in accordance with guidelines provided by the State Board of Education. Thus the problem of improving preparation for college will be made still more complicated by (1) differing standards of competency established by the State's 378 unified school districts; (2) an unclear relationship between such standards and the levels of skills needed for successful college work; and (3) the creation of a new type of high school nongraduate, with whom postsecondary education institutions are probably not prepared to cope.

Changes appear to be needed in the ways students move from high school to college, particularly if the preparation of disadvantaged students for college remains a serious problem in the mid-1980s. Among the alternatives which should be considered are two somewhat radical structural changes for which the educational establishment may not be ready. One would involve adding a pre-college year to provide extensive remediation, tutoring, and counseling for potential college students with inadequate preparation in basic skills. This might be offered by a postsecondary education institution. Little or no college credit would be awarded for this work, but students undertaking it would have greater assurance of steady progress to the baccalaureate degree once they were regularly enrolled as freshmen.

A second alternative would be to encourage overprepared students to leave high school for college after the tenth or eleventh grade, with the possibility of a high school diploma being awarded after successful completion of one year of college work. Some students have acquired the skills, knowledge, and maturity needed for successful college work before their senior year and have little or no interest in what is still available to them in high school. Some drop out before graduation; others get into trouble as a result of their boredom. Moving the most capable students on to college as soon as they are ready might well make it possible for high schools to give more attention to students who would not be ready for graduation or college without special help. The claim of former U.S. Commissioner of Education Ernest Boyer that the American high school may have become obsolete appears worthy of analysis in California, particularly with respect to the problem of student transition from high school to college.

Changing Student Interests in Careers

One of the most important changes in students during the last decade has been their heightened interest in postsecondary education which is directly related to employment opportunities. Most Californians, including women, now work during all or most of their adult life

between completing school and retirement. A majority of recent California high school graduates attend college before entering the labor force, and an increasing number are interested in obtaining preparation for employment. This change is creating problems for four-year colleges and universities in their planning, particularly in an era of stable or declining enrollments.

Increased student interest in employment-related curricula presents two issues for higher education. The first is the extent to which four-year institutions should recognize less-than-degree objectives as a legitimate part of their mission. The second involves society's need for people educated through the associate and baccalaureate degree levels. Would a decline in the number of students pursuing liberal arts degrees which do not lead directly to employment be harmful to the development of the State before the end of the century? The projected decline in the numbers of college-age youth is likely to result in fewer baccalaureate degrees being awarded, unless college-going rates of young people or adults already in the labor force increase. When the factor of decreased interest in college and university degrees is added to the projection of fewer college-age youth, California may have a problem of an undereducated citizenry by the end of the century.

Needs of Older Students: The special needs of older students for postsecondary education related to their job experiences and aspirations constitute a different but related dimension of planning. Many entered the labor force without any formal education beyond high school and acquired skills and knowledge on the job which some students acquire in college. The objectives of these older students include "validating" the education which they gained on the job, broadening their outlook through general education, upgrading, retraining, and personal development. Other older students may be college dropouts or graduates who need retraining for new careers or mid-career changes, such as liberally educated women who have had little or no job-related postsecondary education or experience, or graduates who have been unable to find employment in the fields for which they prepared. In planning career-related education, colleges and universities sometimes consider only the needs of recent high school graduates with no significant work experience. While their needs have high priority, those of older student constituencies who are already part of the work force are also important in planning for the rest of the 1980s.

Institutional Responses to Career Interests: Several dilemmas face higher education institutions as they try to respond to increased student interest in career-related education. First, less than 30 percent of the labor force needs any kind of specialized training at the postsecondary level, beyond what can be learned in on-the-job training over a period of a few weeks. The minority of the labor

force that needs postsecondary education includes personnel ranging from welders to physicians--that is, skilled workers, technicians, semiprofessionals, and professionals. With at least 60 percent of California's young people going to college before entering the labor force, but only 30 percent of the labor force needing specialized training, the problem of finding appropriate ways to respond to increased student interest in preparation for careers is extremely serious, especially for universities which have concentrated in large part in the past on preparing students for graduate and professional studies.

Although student choice can be somewhat influenced by good labor-market information, student demand often greatly exceeds the need for specially trained personnel. The health professions are one example where student interest is significantly greater than the need for additional graduates at all levels, from the technician and paraprofessional through the high-level professions.

State and federal goals for affirmative action for women and ethnic minorities in both postsecondary education and employment make responding to student career interests quite difficult, since student interests are not necessarily congruent with governmental goals for employment and related training. Affirmative action guidelines established by governmental agencies may ignore the principle of student choice among institutions and programs, while assuming that underrepresentation is always the result of some kind of bias. In addition, colleges may be caught between conflicting governmental directives--for example, in California between (1) the recent legislative request that the Community Colleges increase the rate of transfer on the part of women, ethnic minorities, and other disadvantaged groups; and (2) the federal government's urging that they enroll more women and minorities in one- and two-year vocational programs where they have been seriously underrepresented in the past.

The problem of demand for career-related education exceeding manpower needs may lessen later in the 1980s when the number of California residents between the ages of 18 and 24 is expected to decrease below what it is today. However, interest in career education is highly related to student perceptions of need for specialized preparation for employment, and smaller numbers of young people alone will not solve the problem. College students apparently need some feeling of security that they will not be unemployed or underemployed when they graduate because of their failure to obtain preparation for appropriate jobs. New kinds of curricular responses in the liberal arts will be needed for students who want but do not need specific preparation for employment--for example, for entry-level government jobs for which some college or university education is a prerequisite. In addition, colleges and universities may find

it advantageous to work more closely with other providers of occupational education at the secondary and postsecondary levels, including regional occupational centers, adult schools, private postsecondary institutions, government agencies, and business and industry, in order to respond to student interests in career preparation without foregoing the values of a liberal education.

Changing Enrollment Patterns

Although today's students are eager to prepare for employment, those who earn undergraduate degrees are taking longer to do so. One facile explanation is that students are enrolling for lighter course loads, making it impossible for them to complete associate degree programs in two years or baccalaureate degree programs in four. Through the early 1970s, undergraduate students were likely to enroll full time for a number of reasons. Men were required to enroll full time to maintain their exemption from the draft or their eligibility for G.I. benefits. Students with scholarships or other forms of financial aid were usually required to enroll full time in order to remain eligible for assistance. Finally, students who depended upon their parents for most of their financial support tended to enroll full time under the threat of having that support terminated after four years.

After 1976, however, the average credit load at the undergraduate level declined in all three public segments. It increased slightly in 1980 but was less than the load a student would have to maintain in order to graduate "on time." Much of this increase in part-time attendance since the early 1970s may be attributed to the enrollment of large numbers of older students who cannot attend full time, as well as to the expiration of both the draft for military service and G.I. benefits. Other factors are the eligibility of part-time students for financial aid, and the decreasing dependence of college students on parental support. In addition, there has been an influx of part-time students who would not have enrolled at all in the past--for example, older adults without degree objectives and women with family or job responsibilities which preclude full-time enrollment. Increases in the enrollment of educationally disadvantaged students have also contributed to lengthening the time needed to complete degree requirements. This new student constituency usually needs remedial programs and other special services which limit the amount of degree credit they are able to earn at least during the freshman year.

Potential for Institutional Response: Some reasons for slower progress are subject to a degree of control by institutions themselves. Examples are unnecessary transfer between campuses, resulting in loss of credit; and withdrawal from courses after

deadlines for adding courses, resulting in part-time enrollment status. Yet student expectations about the amount of time needed to earn an undergraduate degree appear to be changing as well. In the State University, the norm for graduation is now not four years or even five but more than six. Fewer than 10 percent of Community College students are awarded associate degrees within three years of their first enrolling, and only 6 percent are still enrolled beyond the third year. On one campus of the University, about one-third of the entering freshmen graduate at the end of four years, but somewhat more than one-half graduate after five years. Many students who find it difficult to complete all degree requirements within four years enroll for less than a full load each term and spread their program over five years. Students appear to be increasingly selective about the courses they complete, often enrolling for a full credit load (or overload) and then dropping courses which do not meet their needs before the penalty date established by the institution. A study of Community College students completed in 1976 showed that new students earned only 64 units of credit per 100 for which they were enrolled at the first census week. Dropouts after one term had earned less than half that amount while they were enrolled (California Postsecondary Education Commission, 1976).

Changing Transfer Patterns

Transfer between campuses in the same or different segments appears to be increasing, except between Community Colleges and four-year institutions. Increased availability of federal student aid for the cost of subsistence in the last few years may be one factor in student decisions to change campuses--for example, from a commuter campus near home to one with student housing. Reasons for transfer within segments appear to be more often personal than programmatic--for example, dissatisfaction or boredom with the campus environment after one or two years, rather than a need to transfer in order to enroll in a particular program. Program articulation between Community Colleges and the University and State University appears to be satisfactory in terms of students being able to progress toward a degree with a minimum amount of disruption or loss of credit. However, undergraduate students transferring between four-year campuses have fewer guarantees that courses taken on one campus will meet graduation requirements on another, whether in the same or a different segment. Counselors are becoming reluctant to advise University and State University students about transfer because of their campus' interest in retaining as many students as possible in a period of declining enrollments.

Some students "stop out" for one or more terms to work, travel, or rest, and sometimes enroll on a different campus when they return. This increased freedom on the part of students to meet their own

needs as they see fit appears, at least on the surface, consistent with the principle of supporting student choice in postsecondary education. However, there may be increased costs to the State and the student of producing undergraduate degrees under this increased freedom which have not been considered.

Possible Institutional Responses: Improved preparation for college should result in some shortening of the time students now spend in earning an undergraduate degree. Yet colleges and universities may need to give greater attention to such potential time-saving mechanisms as better counseling, advising, and placement of entering freshmen; increased use of student aid as a means to encourage full-time enrollment; cooperative planning of educational leaves when students want to stop out for a term or more; and limits on the conditions under which intercampus transfer may be approved.

Special Needs of Certain Students

It no longer seems appropriate to characterize some students as "nontraditional." The middle-class, white student majority is diminishing and the student population is increasing in heterogeneity. As noted earlier, a major issue for the 1980s is the need for and desirability of institutional adaptation to the special educational needs of diverse groups of students. A related issue concerns the continued use of Community Colleges as the institutions primarily responsible for making the adaptations, if they must also serve as the transitional agency for some lower division students who want to work toward a University or State University degree.

Ethnic Minorities: The special needs of educationally disadvantaged ethnic minorities have been documented extensively in other Commission reports, in particular, Equal Educational Opportunity in California, Part III (California Postsecondary Education Commission, 1980d). Their needs may be expected to grow in both size and diversity in the 1980s by virtue of the additional minority groups with whom postsecondary education will have to cope, and the increased numbers of students from minority groups for whom special programs are now being mounted.

Programs to attract larger numbers of disadvantaged students date back to 1964, when the University began its Educational Opportunity Program (EOP). Programs for the State University and the Community Colleges were enacted into statute in 1969. In 1974, the Legislature approved Assembly Concurrent Resolution 151, which directed the segments to propose plans "addressing and overcoming, by 1980, ethnic, economic, and sexual underrepresentation in the make-up of the student bodies of institutions of higher education as compared to the general ethnic, economic, and sexual composition of recent California high school graduates."

Student affirmative action programs for ethnic minorities have not been developed fully at the graduate level, where the need is acute. In addition, some of the same issues of student interest versus labor force need are relevant to students from minority groups at the graduate level--for example, high student interest in medicine and relatively low interest in some fields in which the doctorate is offered.

Refugees from southeast Asia are one new minority group needing special programs, as are large numbers of other foreign students with limited English language skills, many of whom are from non-Western countries. Their special needs must be attended to if they are to be an asset in college and university classrooms, rather than a liability.

Women: Women, the new majority in higher education, tend to have fewer special needs than disadvantaged minorities, but their needs are no less important. A case could be made for the view that women were neglected as a minority group in the 1970s, except by a few specially funded reentry programs for older women with special counseling and child care needs. Undergraduate women continue to have a need for role models on college and university faculties, in administrative posts, and in occupations or at levels of responsibility which have been dominated by men in the past.

At the graduate level, women continue to be seriously underrepresented at the University, where the ratio of men to women is almost two to one. In 1979-80, women received 23 percent of the doctorates, 32 percent of the first professional degrees, and 40 percent of the master's degrees awarded by the University. The enrollment of women at the graduate level in the State University exceeds that of men, and women received 55 percent of the master's degrees awarded in that same year.

Other Groups With Special Needs: Other groups with special needs as students, most of whom the Commission has been concerned with at one time or another, are students with disabilities; older, part-time students, including the aging; the institutionalized--in penal institutions, mental health facilities, and convalescent homes; ex-felons; and the dependent children of college and university students. It is not possible in a paper of this length to address the special needs of these new minorities in postsecondary education. However, their needs should not be ignored in planning for the remainder of the 1980s.

POSTSECONDARY EDUCATION'S OBLIGATIONS

California society, in general, and students, in particular, have a variety of needs for educational programs and services to which the public colleges and universities are trying to respond, with what will surely be a decreasing amount of State funds to do an ever more difficult job. Fundamental to planning for the next five years will be a consideration of State, segmental, and institutional obligations to meet the special needs of each potential student constituency. How far should institutions go and for how long should they continue to make adaptations, some of which may involve altering their standards and traditions? Can they rely on pre- and post-admission programs to bring about the necessary changes in students which will enable the students to adapt to traditional institutions? Or should changes be made in college and university academic policies? Admissions practices? Degree requirements? Programs? Student services? Staffing? The remaining sections of this paper address some of these questions.

Admissions and Articulation

Admissions is one of the most critical areas in which the question of institutional versus student change needs to be addressed. The 1960 Master Plan for Higher Education in California gave the University and the State University strong guidance with respect to the size and nature of the applicant pools from which they were to draw their first-time freshmen--the top one-eighth and one-third of all California high school graduates, respectively. Although this recommendation was not enacted into law, the segments have adhered faithfully (and willingly) to it. The Master Plan Survey Team was, in a sense, color-blind, insofar as it did not perceive that disproportionate numbers of most ethnic minority groups would be excluded by this policy. No information about the ethnic composition of student populations was available at the time of the Master Plan, and there initially was no concern that very small numbers of minority students would be enrolled.

Several years after implementing the Master Plan provisions for admissions, the University and State University doubled the percentage of freshmen which could be admitted through special action in order to allow greater access to disadvantaged students from ethnic minority groups. Recently, when the University adopted somewhat more restrictive criteria for freshman admission, it again increased the percentage of disadvantaged students who might be admitted by special action, in an effort to compensate for excluding some who would have been eligible under the earlier criteria. In the meantime, both the University and the State University have mounted

various outreach programs in junior and senior high schools which are designed both to improve the preparation of their incoming students and to increase the numbers of ethnic minorities eligible for regular admission.

A number of issues relating to admissions appear to merit further attention:

1. Are the segments admitting some students who have a very low probability of academic success because of deficiencies in preparation or an inflated grade-point average in high school which may drop below a C average in college and university work? Are some students flunking out?

2. Would student choice of institution be enhanced by making available to students information concerning differences in the characteristics of successful students enrolled in different undergraduate programs and on different campuses within each segment?

3. Should the University and the State University experiment with the use of more subjective approaches to the measurement of potential for academic success, particularly in the admission of students who graduated from high school several years ago? Should some weight be given to noncognitive characteristics in making admissions decisions?

4. Should admissions testing be phased out? If so, what alternatives could be developed to compensate for differences among high schools in academic standards, quality of instruction, and other factors which tend to reduce the predictability of success in college?

5. Should the 1960 Master Plan guidelines be revised to enlarge the eligibility pools of high school graduates from which first-time freshmen are admitted to the University and the State University? Are some students now being denied admission who would have a reasonable probability of success?

6. Should the University and the State University attempt to recruit a larger percentage of high school graduates who are eligible for freshman admission but are either enrolling in a Community College or not going on to college at all?

7. Should the open door to the Community Colleges be closed slightly, to divert to other types of educational institutions students who are seriously deficient in basic skills or do not have degree, certificate, or transfer objectives?

Community College Transfer

The free flow of transfer students from the Community Colleges to the University and the State University was an important plank in the 1960 Master Plan, under which some 50,000 students who would have enrolled in the four-year institutions would be diverted to Community Colleges for their lower division work. The Master Plan Survey Team concluded that the large expansion in lower division enrollments which had been projected for the 1960s could best be accommodated in Community Colleges, rather than in the four-year segments, in order to guarantee access and be consistent with the best interests of the State. Increases in Community College enrollments exceeded the Master Plan projections, and the number of students transferring to the University increased by more than 170 percent and to the State University by more than 140 percent between 1965 and 1975. At the same time, first-time freshmen increased by only one-fourth in the University and two-thirds in the State University.

California has depended to a considerable extent upon voluntary mechanisms for achieving articulation between the segments, under segmental policies and regulations which encourage transfer from Community Colleges. The Legislature intervened only when it appeared that the upper division programs could not absorb all the qualified students who wanted to transfer from Community Colleges in the late 1960s.

Community College transfer students include some who would have been eligible for freshman admission to the University or the State University and others who were ineligible on the basis of their high school records. The University recently adopted a policy which simplifies transfer requirements for students who would have been ineligible for University admission as freshmen because of deficiencies in their high school course of study. The University has also reinstituted a system for reporting information to the Community Colleges about the performance of their transfer students. The initial University reports showed that both "originally eligible" and "ineligible" students from Community Colleges performed at a generally satisfactory level after transfer to the University.

The State University has given the Community Colleges broad authority for certifying that their students have completed lower division general education requirements, and that certain of their courses are baccalaureate-level and should qualify for transfer with degree credit. Faculty groups in the State University have expressed dissatisfaction with the results of this delegation of authority, and with some aspects of Community College student preparation. Revisions in procedures to be used by Community Colleges in certifying general education and other baccalaureate-level courses

are being made which should alleviate many faculty concerns. The University does not delegate such authority to the Community Colleges, but its faculty has also made known its reservations about current procedures for awarding transfer credit.

Among the questions relating to transfer and articulation between the Community Colleges and the University and State University that warrant attention are these:

1. Can the decline in the number of Community College students transferring to the University and the State University be attributed to course or program articulation problems? Are Community College students simply less interested in baccalaureate education? Has there been a de-emphasis of the transfer function in the Community Colleges?

2. Do variations in the performance of transfer students from different Community Colleges constitute a problem which requires State-level action? Would the problem be alleviated by better information flowing to the Community Colleges about the performance of their students after transfer?

3. Have Community College transfer students acquired the levels of reading and writing skills which are necessary for success in upper division work? If not, what kind of remediation should be required of them--or should such students not be permitted to transfer?

4. Do differences among campuses in the University or State University system in what is acceptable for transfer now constitute a serious barrier to transfer? How far can or should the segments go in developing statewide articulation policies and agreements with respect to requirements, procedures, programs, and the like, to replace regional or bilateral agreements?

5. What priority should be given to University and State University students or graduates who want to transfer into Community College programs which are impacted--for example, nursing and dental hygiene?

6. Is it feasible for Community Colleges to develop articulation agreements with private postsecondary institutions offering similar kinds of occupational programs so that proprietary school students can work toward an associate degree assured that credit will be awarded for their proprietary school coursework?

Standards and Requirements

Educators and society at large are concerned about what they perceive to be a long period of declining standards in the elementary and secondary schools, as well as in colleges and universities. There is a pervasive impression that students are seriously underprepared as they move from elementary to secondary school and into college, and that the grades awarded are highly inflated. College and university faculty members express dissatisfaction with their students' writing and other skills when they enter college, as they move from the lower to upper division, and when they graduate. However, faculty dissatisfaction with student performance is sometimes unrelated to the grades awarded. There appears to be a lower incidence of academic probation and dismissal now than when students were regarded as better prepared for postsecondary education.

There has been no clear definition of the role that the Commission might play in the area of standards, beyond insuring that student flow between segments is not impeded by problems related to grading standards. Grades and credits are in a sense the currency of higher education, particularly at a time when standardized testing is in low repute. Grades and grade-point averages in large part have determined whether students would be placed on academic probation or dismissed; accepted as transfer students at another institution; graduated; admitted to graduate or professional school in competition with students from the same and different institutions; and offered employment, also under competitive conditions.

Several factors associated with the decline of standards are related to changes in grading policies during the 1970s. With good intentions, colleges and universities adopted what were characterized as nonpunitive grading policies, whose principal feature was forgiveness for unsatisfactory work resulting in grades of "D" and "F." One impetus for this change was a desire to help older students--particularly veterans--by reducing or eliminating penalties for earlier failures in college-level work. Another was the desire to encourage students to get breadth by taking courses outside their major without fear of receiving penalty grades in such courses. Additional support was enlisted for nonpunitive grading when colleges and universities began admitting large numbers of disadvantaged students who were not prepared for college-level work. In order to avoid institutional as well as student failure, recourse was sought in nonpenalty grades. Finally, students were allowed to repeat courses when they were not satisfied with the grades they had received--for example, a pre-medical student wanting to raise a grade in a course in Anatomy from "C" to "B" in order to improve his chances for admission to medical school. The result of these policies was the reduction--or, in the case of some colleges, elimination--of grades of "D" and "F," and liberalization of the use

of "W" (Withdrawal) and "NCR" (No Credit) for students who in the past would have received unsatisfactory or failing grades. At the extreme, "W's" may even be substituted for failing grades on final examinations or in courses completed.

There seems to be some movement away from the practices of the early 1970s and toward the reinstitution of penalty grades of "D" and "F" or limitations on the use of "W," or both. Meanwhile, standards for awarding grades of "A," "B," and "C" may also have declined as another aspect of grade inflation. However, there is little documentation of this type of decline, which differs from the substitution of "W" and "NCR" for grades of "D" and "F." A number of questions regarding standards remain, beyond those involving grades:

1. Would students who plan to attend the State University or a Community College be better prepared if they were required to take a pattern of preparatory courses similar to that required of applicants to the University, or some portion thereof?

2. Do colleges and universities have the right to expect that regularly admitted students will have reading, writing, and computing skills adequate for college-level work by the mid-1980s? Under what circumstances should they insist that students obtain remediation elsewhere?

3. Should the Board of Governors of the California Community Colleges establish a floor below which remediation in reading, writing, and mathematics skills will not be offered as part of the college curriculum? Should the University and the State University also set such a floor?

4. How can the declining quality of preparation of high school students for college (as evidenced by their performance on tests, and faculty opinion that entering students are less well-prepared for college than before) be reconciled with grade inflation and an apparently low rate of failure in college and university work?

5. Have colleges and universities, particularly the Community Colleges, gone too far in adapting teaching methods and course requirements to the declining levels of student skills and abilities? Are students who cannot read and write at the college level receiving passing grades in college courses?

6. Is there any common understanding among campuses and segments about academic probation and dismissal--their meaning, extent of their use, and actions flowing from them? Is there a need for greater commonality in practice?

7. Should there be special consideration for disadvantaged students from low-income and ethnic minority groups in awarding punitive grades and imposing academic probation and dismissal?

Retention and Persistence

Issues related to retention of undergraduate students were given relatively little attention by the public segments when enrollments were increasing rapidly. One possible exception was students in specially funded programs for disadvantaged students or admitted under special action, where their success was monitored during at least their freshman year. Attitudes concerning persistence vary considerably among the segments. The Community Colleges give greatest credence to short-term student objectives which do not require the attainment of a degree or admission to a baccalaureate program as a transfer student. About 15 percent of the Community College students earn an associate degree or are still enrolled by the beginning of their fourth year after entrance, and about 13 percent transfer to the University or the State University, including some who graduate from the Community College.

A State University study published in 1981 showed that about 40 percent of the first-time freshmen who entered in Fall 1973 had graduated after seven academic years from the same or a different State University campus, and that both retention and graduation rates varied significantly among the campuses. The three-year graduation rate for Community College transfer students entering the State University in Fall 1973 was found to be 34 percent, with no information yet available for the longer period of time. Although no comparable data for University students are available, the University believes that eight out of ten students who start as freshmen at the University will eventually obtain the baccalaureate from some college or university--six after five years at the University; a seventh after more than five years; and one of the three who leave the University, from another institution.

Selected statistics on persistence to the attainment of an undergraduate degree have been presented in lieu of generalizations and value judgments about attrition and the loss of talent resulting from nonpersistence. The University is highly selective in admitting freshmen and expects that those who are admitted should graduate. The State University, while less selective, sets its admission standards at a level where those who are admitted have good academic potential for completing a degree program. Although other student objectives are not recognized, the State University is probably more tolerant than the University of students whose interests do not lead them to complete degree requirements.

Reasons for nonpersistence in the University and the State University are not well known. It is difficult to estimate, for example, the amount of attrition resulting from lack of interest or boredom, job opportunities which are more attractive than courses of study, financial problems, or simply student choice to "stop out." Since some students return to college after "stopping out," campuses might help plan leaves of absence which will have educational value and enhance the probability of their returning to college.

Several issues appear worthy of attention:

1. Are present persistence and retention rates in the University, the State University, and the Community Colleges too low in terms of students completing degree, certificate, or transfer programs? Are the colleges and universities losing a disproportionate number of "good" students before graduation? If so, why?

2. What kinds of intervention techniques can campuses use to increase the retention of students who have a reasonable probability of succeeding in college? Should the State provide special funding for such purposes?

3. Is there unnecessary transfer between campuses within a segment, or between University and State University campuses, which increases the amount of time and course work needed to complete degree programs?

4. Are institutions retaining some students who are doing unsatisfactory work or not making progress, and whose prospects for eventual success appear to be poor?

5. What level of retention should colleges and universities reasonably expect to attain for part-time students who may not be pursuing a prescribed curriculum?

The Quality of the Experience

Currently, undergraduate students are more likely than before to enroll part time and intermittently, to transfer between campuses and segments, to combine work and study as equally important pursuits while preparing for some higher level of employment, and to drop out of college before completing undergraduate degrees. While more students than ever are housed in dormitories, a majority live in other kinds of facilities while commuting to the campus. A large number of part-time undergraduate students are now pursuing courses of study of their own design, rather than the curricula prescribed for full-time students. Since they spend little time on campus, they

have minimum contacts with faculty outside the classroom. They benefit little from student activities and services for the same reasons.

The benefits such students receive may be as great as those enjoyed by students who enroll full time, but there is some evidence to the contrary. Several questions thus need to be raised about part-time and other irregular attendance:

1. What kinds of integrative experiences can colleges and universities develop for part-time students nearing completion of their degree requirements, to compensate for what is often a lack of cohesion or continuity in their educational program?

2. What can colleges and universities do to strengthen student/faculty relationships for students who enroll only part time or live off campus?

3. Should part-time students with financial need be encouraged to seek student aid in an amount which would enable them to enroll full time, on the grounds that the educational benefits accruing to students whose primary activity is education are greater than to those who must combine employment and education?

Student Services

Student services include peer and professional counseling, health care, co-curricular activities, tutoring, child care, placement, and other programs designed to help students succeed in their studies and to enhance the quality of their educational experience. State policy related to the funding of student services varies among the segments and among student groups within segments--for example, disadvantaged students and students with disabilities. The educational values of these services for students in general have been described at length, but seldom have been documented in a convincing fashion in terms of the impact of increased or decreased funding for particular services. As State funds to support postsecondary education become more limited, the issue of need for student services, apart from those which are directly related to instruction, increases in importance. It appears that student services which were institutionalized before the 1970s are threatened by both changes in the characteristics of students now undertaking postsecondary education and fiscal constraints.

A few questions which need to be addressed in planning for the 1980s are:

1. What pre-enrollment services should be provided by colleges and universities, either individually or in consortium arrangements, for example, community advisement centers, with educational information, advisement, and counseling? Career information and advisement? Assessment of skills, interests, abilities, and knowledge? Evaluation of transcripts? Financial aid information and counseling? Others?

2. Should the support services which have enhanced the success of disadvantaged students be extended to all students needing them? Should the State appropriate funds for such services? Should they be funded wholly or in part from fees paid by all students? User fees?

3. What should be the scope of on-campus counseling services which are not supported by user fees--educational/academic? Financial aid? Career? Personal? Marriage and family? Drug and alcohol? Others?

4. Are there systemwide problems (or on certain campuses) involving the perceived quality, relevance, availability, or other aspects of counseling and other services offered students?

5. What would the impact be of substantial increases or decreases in the availability of educational, career, and other types of counseling services, in terms of persistence, performance in courses, changes in major, and course completions?

6. Which student services should be curtailed or even eliminated if revenues from student fees must be diverted from the support of student services to instruction under conditions of sharply reduced State support?

PROSPECTS FOR STUDENTS

The main business of California's colleges and universities is the education of students. Changes in student needs, interests, skills, abilities, goals and objectives, and other characteristics appear to be occurring more rapidly than changes in the institutions they are attending. Colleges and universities must make even more strenuous efforts to prepare those who are doubly disadvantaged by virtue of economic condition and ethnicity, while attempting to obtain better preparation for those students who have long been the majority group in higher education.

Developing programs and services to help the increasingly diverse students adapt to a less than dynamic educational environment has

been the major response of colleges and universities to date. This is probably not enough. Institutions need to rethink their obligations and practices in light of these changing student attributes--not only because they need students more than ever before, but because students need the best possible education for their own welfare and that of the State.

FACULTY ISSUES FOR THE 1980s

INTRODUCTION

Because they perform the major tasks that constitute a college or university education, faculty are of central importance to the educational enterprise. They teach, advise, and counsel the students for whom the institutions exist; they conduct the research which forms the basis of the generation's new knowledge; they develop new programs ans opportunities for learning; and they share in the governance of the institutions in which they perform these functions. In addition, faculty salaries constitute a major portion of the academic budget of most institutions, and they represent a major financial commitment on the part of the institution.

The faculty professions as a whole reaped substantial benefits from the "golden growth" era in higher education, a period which began with the expansion of enrollments in the late 1950s and continued well into the 1960s. Carol Herrnstadt Shulman cites four major faculty gains of that period:

> First, a faculty career acquired status equivalent to other profesisons. Second, demand for qualified faculty was high. In this sellers' market, academics were virtually guaranteed job mobility within or among institutions. Such mobility gave them the opportunity to develop a satisfying career. Third, college faculty wom, formally or informally, central roles in academic decision making on many campuses. And fourth, seemingly unlimited financial resources available during this period helped to promote and consolidate the preceding achievements (Shulman, 1979, p. 1).

Also during that period, faculty salaries began to rise, to the extent that real gains in purchasing power were made relative to the cost of living. Perhaps the most important gain, however, was the increase in faculty power in most institutions: "In major universities, the faculties came to exercise effective control of the education and certification of entrants to the profession; the selection, retention, and promotion of their members; the content of the curriculum; and work schedules and evaluation of faculty performance" (Mortimer and McConnell, 1978, p. 161).

That this golden growth era in higher education is over scarcely needs reiteration. The "buyers' market" in higher education has reduced faculty prospects for job mobility and rapid career advancement; faculty salaries are no longer keeping pace with the rise in the cost of living; and finally, the pressures of fiscal stringency and potential enrollment decline are leading to fewer openings for new faculty and to increased concern about the percentage of faculty who are "tenured-in."

Faculty morale reflects these depressing factors. Everett Ladd and Seymour Martin Lipset, in a series of articles on faculty opinions in The Chronicle of Higher Education, report that pessimism is the predominant faculty mood. Professors believe that their economic status is eroding compared to other professions; that "too many people ill-suited to academic life are now enrolling in colleges and universities;" that there has been a "widespread lowering of standards in American higher education;" that students are "seriously underprepared" in the basic skills of written and oral communication; and finally, that higher education is falling in public favor (1977, p. 1).

Contrary to the gains made in faculty power during the growth period, faculty authority may suffer erosion as fiscal stringency places budgetary control increasingly in the hands of governing boards and administrators; as the necessity for budgetary trade-offs pushes decision making up to ever higher organizational levels; and as legislators and the general public demand greater efficiency and accountability from both faculty and the institutions of which they are a part (Mortimer and McConnell, 1978, p. 161). Besides the increasing resumption by administrators and trustees of authority previously delegated to the faculty, various external groups are gaining ever larger roles in the governance of educational institutions--among them, state legislatures, executive agencies of state government such as departments of finance, Congress and federal agencies, state and federal courts, statewide coordinating boards, student lobbies, and the public at large.

As a countervailing force, and because of the relative weakness of traditional mechanisms of participatory governance such as faculty senates in dealing with fiscal crises and increased external intervention in academic institutions, many faculties have voted to adopt collective bargaining--a step which, while increasing the adversary nature of the relationship between the faculty, the administration, and often, the students, may enable faculty to retain if not recapture some of their previously held power (Mortimer and McConnell, 1978, pp. 54-55).

The decade of the eighties is placing new pressures on college and university faculties. Pressures for increased efficiency and

accountability are raising questions about the adequacy of present faculty governance mechanisms and about review, selection, and promotion processes. Pressures for increased institutional flexibility for affirmative action, and for openings for new, young faculty, may bring into question even the long-held commitment to the tenure system as a necessary part of the academic profession. Finally, pressures on the faculty to adapt to the needs of different types of students in higher education will continue to increase, in the face of declining resources with which to retrain and develop faculty to meet these new demands.

During the eighties, institutions must find answers to new questions of particular concern to college and university faculties. Will new governance mechanisms, such as collective bargaining, threaten the concepts of collegiality and shared governance? Will faculty salaries continue to decline in relation to the cost of living? Given stable or declining enrollments, and their effects on the number of new positions available, how can "new blood" be added to faculties, and how can affirmative action goals be achieved? How can the needs of new types of students be met if new faculty and programs are needed but there is little or no turnover of personnel? Given the problems of selective reallocation of resources, what is likely to happen to tenure and promotion policies, faculty development, and early retirement?

While the specific pressures and related questions cited above may be of concern to all faculty, the effects of these pressures may be felt differently by faculty depending upon the type of institution in which they work. In California, the 1960 Master Plan for Higher Education establishes a specific differentiation of functions among the three segments of California public higher education. The University of California is recognized as the State's chief agency for research, and is the only segment allowed to grant doctoral degrees. Thus, University faculty have a commitment to research as a major part of their role, with teaching being of somewhat lesser importance, particularly with regard to promotion and tenure. The State University and Colleges system is charged to provide students with general collegiate education through the master's degree level, with particular emphasis upon training its students for teaching, both in the K-12 system and in postsecondary education. The State University faculty, as compared to the University faculty, generally spend a larger portion of their time in teaching, rather than in research. Finally, the California Community Colleges, are designed as the major "open door" segment of California higher education. The Community Colleges have a variety of missions, including the provision of the first two years of collegiate education to those students who desire to transfer to four-year institutions; the provision of vocational, technical, or occupational courses of study, many of which can be completed in one or two years' time; the

provision of remedial, developmental, or basic skills courses or programs to those students needing such assistance; and the provision of services to a variety of interest groups under the general heading of "community service." Faculty in the California Community Colleges thus may play a variety of roles, depending upon those portions of the college's mission in which they are involved, although their roles are primarily instructional.

Their differing roles are not the only distinction among the faculty in the three public segments; the extent to which the faculty share in the governance of their institutions differs markedly. The University of California has a history of strong faculty governance dating from the 1920s. The governance structure is a loose federation of quasi-autonomous faculty senates on the nine University campuses, with a system-wide representative assembly or senate. In contrast, the State University and Colleges system, "gathered together from a clutch of semi-autonomous colleges, had no tradition of collective action nor much of faculty governance," and the authority of its systemwide academic senate is less extensive than that of the University's (Mortimer and McConnell, 1978, p. 45). The California Community Colleges, which began establishing academic senates only in recent years, are governed by autonomous boards in the seventy separate districts, with the power of faculty to share in governance varying from district to district.

Clearly, given such differences in the missions of the three public segments, in the roles of the faculty, and in the relative power of the faculty to share in the governance of their institutions, many of the issues to be discussed in the pages which follow may have differing effects on faculty, depending upon their institutional affiliation. While the treatment of the issues will be general in nature, a number of the specific differential effects for the public segments will be noted and discussed.

The sections of this faculty paper address these issues under four major headings: collective bargaining; faculty affirmative action; part-time faculty; and faculty mobility, development, and retirement. Wherever possible, studies specific to faculty in California institutions are cited, while national studies and data are used to supplement the analysis of the various issues.

COLLECTIVE BARGAINING

Perhaps the most important factor in the changing picture of faculty is the introduction of collective bargaining in all three segments of public higher education. The ability of the faculty to organize and bargain collectively has introduced a new current of unknown

strength and depth into planning considerations for the years ahead. In addition, collective bargaining may well affect virtually every area of faculty life from teaching loads and salaries to tenure and retirement.

Current Status of Faculty Bargaining

Two separate pieces of legislation established collective bargaining in California's public segments. Senate Bill 190 (Rodda), enacted in 1975 and known as the Public Education Employer-Employee Relations Act, permits Community College faculty to engage in collective bargaining. Four years later, Assembly Bill 1091 (Berman), known as the Higher Education Employer-Employee Relations Act, extended collective bargaining to University and State University faculties. That the extent of unionization in the segments varies might be expected, given both the separate legislation and the differing time the segments have spent under collective bargaining statutes. Currently, 52 of the 70 Community College districts have chosen exclusive collective bargaining representatives. Because the Berman Act became law only in July 1980, the University and State University faculties are not as far along in their organizing efforts, although both segments are preparing for the possibility that bargaining will grow and perhaps even thrive on California campuses in the years ahead. The social, economic, and political forces that are contributing to this tendency are well enough known that they need not be detailed here. It should be sufficient to note that the Ph.D. surplus, the projected downturn in enrollments, the relative decline in faculty salaries, the passage of Proposition 13, and recent changes in public priorities have all converged to contribute to a climate conducive to faculty unionization. (See Baldridge and Adams, 1979, for a reasonably thorough account of these circumstances in California.)

Potential Effects on Governance

Collective bargaining for faculty members entails several significant departures from the models of unionization found in industry, which has not enjoyed the tradition of collegiality and shared governance found on many campuses. Partly for this reason, the experts are not in agreement about its implications and consequences. George W. Angell, former Director of the Academic Collective Bargaining Information Service, has argued that bargaining will have a minimal effect on the authority of university administrators to make decisions; he seems almost optimistic about the preservation of faculty rights and privileges (1978). Barry N. Steiner of the New Jersey State Office of Employee Relations is not as sanguine about the future of collegial governance. He speaks of

external pressures resulting from public funding and notes that, in the case of academic collective bargaining,

> the model for resolution changes from collegiality, which in theory is non-adversarial and allows for a broad spectrum of views to be openly debated, to the bargaining model which is essentially adversarial and which requires each side to speak through a spokesperson, defending and seeking to achieve agreement as to each side's ultimate position (1978, p. 24).

These two viewpoints mark the outer boundaries of opinion about the impact of collective bargaining on academe, although the weight of circumstances and precedent seem to favor Steiner's opinion. If bargaining does occur in all of California's three public segments--and even this is by no means clear at the present--the processes and the issues involved may vary considerably among the segments. In some measure, this variability will stem from the legislation itself. The Berman Act may be unique in collective bargaining legislation in that it is explicitly intended to preserve the authority and autonomy of the faculty senates of the University and State University in the areas of curricula, courses, admission and graduation requirements, faculty personnel actions, and other matters pertaining to educational policy. The rationale here was to ensure the traditional power of the senate against potential control by either the administration or the union. This legislative attempt to preserve collegiality anticipated the problem of the senates being reduced to the status of "social clubs" because of faculty unionization (Angell, 1977, p. 130). Additionally, the Berman Act requires that the faculties of both of the four-year segments bargain as single units with their respective governing boards and confer with the Department of Finance and the Legislature on matters which have fiscal ramifications. In contrast, the Rodda Act, which pertains to the Community Colleges, vests a great deal more authority for academic and personnel matters in the hands of the "public school employer," which is the governing board of the local Community College district. Wages, hours, and other terms and conditions of employment are also to be negotiated with the "employer." Thus, authority is much more centralized and a great many more issues can be expected to be brought to negotiation in the Community Colleges.

Effects on Salaries and Job Security

To the extent that faculties choose to organize, certainly the most significant topics to be negotiated will include salaries, fringe benefits, workload, and other terms and conditions of employment, as specified in the legislation. Compensation, of course, will be of prime interest to faculties; however, owing to the relative recency

of collective bargaining in higher education (fewer than 15 faculties in the nation were organized prior to 1969), the effect of unionization on salaries is not clear at the present time. Some surveys have been conducted which generally reveal a salary gain for organized faculties (Birnbaum, 1974 and 1976; Leslie and Hu, 1977; Morgan and Kearney, 1977), while other studies show no significant increase ("Education," 1977; and Marshall, 1979). Some of these researchers hold the view that, after an initial salary advantage for collective bargaining, the initial gains may be declining. What can be concluded at this stage from the research on unionization and faculty compensation? The weight of the conflicting evidence seems to favor collective bargaining slightly. However, unionization is still too recent a phenomenon in postsecondary education and the commendable research efforts to determine a clear pattern have not been successful. One other possibility, borne out by the findings thus far, is that there will be no clear evidence favoring salary gains for unionized faculty. This conclusion, of course, may be damaging to the cause of collective bargaining, since an increase in wages is held to be a major incentive for faculty organizing.

A second important condition of employment that may arise out of faculty collective bargaining pertains to job security. Van Alstyne suggests two alternative prospects that might derive from faculty negotiation of job security (1971). One possibility is that it may be traded off for more short-term gains, such as salary increases. A second possibility is that job security might be extended beyond the traditional definition of academic tenure to include "probationary" faculty. Because tenure is, in the eyes of most faculty, the foundation of a free and productive professoriate, it is unlikely that it would be conceded or diluted in any fashion as a result of negotiation. Much more plausible is that efforts will be made on many campuses to extend job security even to nontenured faculty through the use of reduced probationary periods. In Van Alstyne's words:

> As collective bargaining becomes prevalent, and as the views of junior faculty members come to weigh heavily in the negotiating process, a condition of instant tenure may be demanded. That is to say, the job security provision could apply even in the first or second year of appointment, so that the termination decision could not be made without a fairly elaborate demonstration of reasonable cause (p. 216).

Any extension of job security of the kind described by Van Alstyne may ultimately point to the retention of a greater number of mediocre faculty members. Again, experience is too limited at this stage to do more than signal a potential problem in this area.

Effects of the Scope of Bargaining

Perhaps the most challenging and problematic set of issues in faculty unionization concerns the scope of bargaining and its implications for campus management. It is here that collegiality and collective negotiation may find themselves in a crosscurrent of interests. Historically, governing boards and administrations have delegated many of their functions to committees of faculty, or committees composed of faculty, administrators, and other members of the campus community. To this extent, it can be argued that the faculty has fulfilled a management role. This issue has been considered by the Supreme Court in the case of Yeshiva University, where it ruled that Yeshiva faculty are a part of management and that "they are, in effect, substantially and pervasively operating the enterprise" (for background, see "High Court," 1979 and 1980). In the case of California's four-year segments, however, the Berman Act anticipates this question of what constitutes management:

> "Managerial employee" means any employee having significant responsibilities for formulating or administering policies and programs. No employee or groups of employees shall be deemed to be managerial employees solely because the employee or group of employees participate in decisions with respect to courses, curriculum, personnel and other matters of educational policy. A department chair or head of a similar academic unit or program who performs the foregoing duties primarily on behalf of the members the academic unit or program shall not be deemed a managerial employee solely because of such duties [Government Code, Title I, Division 4, Chapter 12, Sections 3562(L)].

This management issue is less clearly prescribed in the Community College legislation, but the authority rests essentially where it always has; in the hands of the administration. Although the Yeshiva case has no direct bearing on public institutions, where the right to bargain is determined by statute, the case does illustrate one of the central problems in the scope of bargaining issue, and may have indirect implications for the Community Colleges, even if only regarding clarification of what constitutes "management."

In typical non-academic collective bargaining, administrators are constrained to deal exclusively with representatives of the bargaining agents on matters pertaining to terms and conditions of employment. Unions may consent to allow some matters involving faculty considerations to be resolved through traditional collegial mechanisms, but it is not probable that the unions will ever yield any substantive degree of power to such collegial modes of governance. Thus, in the California Community Colleges, it is likely

that administrators will attempt to conserve their traditional authority, while faculties, since they were granted relatively little autonomy by the legislation, will use collective bargaining to achieve their gains. For the University and State University, however, the Berman Act makes the governance situation significantly different, since it obviates many of the control problems pertaining to matters of educational policy by legislating them into the domain of the academic senates. The legislation confirms a long history of faculty senate authority in the University as delegated by the Regents, and it clarifies and ensures a measure of authority for the State University faculty senate which had not been explicit before. In sum, a general forecast for the faculty role in governance and collegiality, under collective bargaining, seems to be as follows: the University's faculty senate will essentially retain its traditional authority; the State University's faculty senate will gain some strength; and the faculties of the Community Colleges may or may not gain authority, depending on their effectiveness in negotiating with local district administrators.

Even though the Berman Act defines the scope of bargaining in some areas for the University and State University faculties (and thus limits the power of the unions), other specific matters will remain to be bargained in these segments, and most likely an attempt will be made to negotiate a wider range of issues in the Community Colleges. Precisely what will be negotiated will depend on which issues are mandatory for negotiation and which are permissive for negotiation at the discretion of management. Certain matters are held legally to be a management right, typically those concerning the administration's obligation to manage the institution. Those which are subject to negotiation only when management chooses to do so are permissive matters. On the other hand, it is mandatory that those matters which involve terms and conditions of employment (salaries, workload, schedules, grievances, and the like) be negotiated, because they are seen as impossible to separate from the quality of individual teaching performance. The difficulty with the mandatory/permissive distinction lies in determining the boundary between these two nebulous domains and interpreting the bargaining statutes in respect to what can be negotiated by faculty unions. In general, it seems plausible that administrations will attempt to retain broad management prerogatives, beyond those matters defined in the legislation as mandatory and that the scope of bargaining concerning many specific, substantive matters ultimately will be determined on a case-by-case basis. Some of these matters--for example, the academic calendar, the qualifications and responsibilities of administrators, and work location--already have been brought before state labor relations boards and ruled to be permissive issues. The impact of policy decision on these matters as they influence terms and conditions of employment, however, is negotiable. Even in those cases where management clearly has the authority to make decisions,

the impact of those decisions on faculty terms and conditions of employment is mandatorily negotiable. If, for example, the administration decides to reduce the total operating costs of a given program by ten percent, the faculty cannot bargain on the decision, but it has the right to negotiate the impact of this matter, insofar as it may influence the terms and conditions of employment (Begin, 1978).

Experience elsewhere regarding the likely impact of scope of bargaining on governance is not extensive enough to warrant specific conclusions for California postsecondary education. A vast array of situational and contextual variables interact with collective bargaining and its effects on campus governance. In her study of governance at unionized four-year colleges, Barbara Lee found that "faculty as a whole gained formal governance power through the union contract" which, she observed, confirms the general results of other studies. She noted, however, that "it was often difficult to separate the effects of unionization from the effects of other contextual factors" (Lee, 1979, pp. 565-585). She found that such things as a faculty's pre-unionization autonomy and the administration's attitudes toward the faculty's role in governance were significant ingredients in determining governance processes after unionization. She also observed that, on campuses where faculty senates were relatively powerful before collective bargaining, they tended to retain that power after unionization. To the extent that this pattern holds true for California's three public segments (and it appears that it will), unions will gain the most strength where the faculties have historically had the least power--in this case, the Community Colleges. As noted earlier, the Berman Act explicitly preserves the key aspects of traditional senate governance for the University's campuses, and clarifies as well as strengthens them for the State University's campuses. Thus, if unionization occurs, the various components of the campuses in all three segments will maneuver to gain new powers or preserve old ones. The accretion or erosion of faculty authority will result from negotiation in the ambiguous area of "scope," which lies between the mandatory and permissive issues of bargaining.

Effects on Administration

Beyond the direct impact on terms and conditions of employment that collective bargaining has for faculty, unionization will have likely outcomes for other campus constituencies, such as administrators. Given that a number of issues may be brought to the bargaining table, it would appear that some degree of an adversary relationship will be fostered (or accelerated, as the case may be) between the administrations and the faculties in all of the segments. The intensity of this relation no doubt will vary as a function of specific bargaining

climates and personal styles in any given case, and this will be quite difficult to predict with any accuracy. If the extent of the adversary relationship also is influenced by the amount of bargaining that will occur, then the most evident adversary situation should be found in Community College bargaining, for the simple reason that, as is clear from the legislation, the faculties there appear to have the most to gain from collective bargaining negotiations. Academic councils and other traditional faculty bodies will most likely be supplanted by the unions as the main voice of the faculty in matters of campus governance (Begin, 1978; Mortimer and McConnell, 1978, pp. 81-85). Ladd and Lipset, in their Carnegie Commission study of unionism, describe these probable changes in the role of administrators:

> It is clear that the adversary relationship inherent in the very conception of collective bargaining does change the role and image of university administrators. Ideally, they have been viewed as the colleagues and representatives of the faculty in coping with off-campus power--the alumni, public opinion, the press, the legislature, the trustees. They are expected to be a buffer. In intramural matters, good administrators often operate informally; a good dean rarely inquires as to what given individuals are doing with respect to teaching load, sick leave, and the like.
>
> Under collective bargaining, administrators, often down to the level of department chairmen, become responsible for a legally binding contract. The institution will be held legally responsible for their actions. They become, as the unions insist, representatives of management who seek to protect management's prerogatives and rights under the contract (1973, p. 88).

Although the Berman Act excludes department chairs, Ladd's and Lipset's point still stands: under collective bargaining, administrators become "agents of the employers' side of the negotiations" and are hindered in their role as advocates for faculty salaries and benefits.

Effects on Governing Boards

Even at this early stage of faculty organizing, it seems safe to predict that the roles of the segmental governing boards will change, though probably in different ways. One area where change may be expected for the Regents and the Trustees pertains to faculty salaries and other fiscal matters. The Berman Act mandates that the bargaining agents "shall maintain close liaison with the Department

of Finance and the Legislature relative to the meeting and conferring on provisions of the written memoranda which have fiscal ramifications" (Berman Act, Sections 3572, 3572.3). This explicit authorization to bypass the Regents and Trustees seems likely to dilute their authority and, in some circumstances, may change their role as final, official advocates for faculty salaries and other financial matters. In contrast, Community College faculties historically have dealt directly with their funding source, the local boards of trustees. There does not appear to be any role change in prospect here, although the processes may be altered rather drastically. It can be expected that unions may take a more active political role in the election of local, pro-union trustees. Indeed, this has already occurred in at least one Community College district in the State. There is also discussion in some areas about a statewide salary schedule for all Community College faculty. At this point, however, the prospect for such a system seems remote. Whether there may be other areas of change within the public segments in governing board authority remains to be seen; specific details will perforce await experience.

Effects on Student/Faculty Relations

It is difficult to predict how students will respond to the climate fostered by collective bargaining. In the late 1960s and early 1970s, they might have sided with labor. In this new era, Ladd and Lipset foresee possible new tensions between students and faculty brought on by unionization. The Carnegie study cites recent instances where adversary relationships have developed, mostly in respect to student desires to have a voice in matters such as teaching and the curriculum (1973, p. 88). To the extent that unions try to limit student participation in campus governance and educational policy, they no doubt can be assured of resistance and perhaps conflict in this quarter.

Possible Effects on Education Quality

Finally, related to the scope of bargaining question is another, perhaps inherent, outcome of negotiation: its impact on academic quality. Birnbaum, in his study of unionization and faculty compensation (1974), is concerned about what might be categorized as an ultimate issue of educational quality. He speculates that bargaining agents need to demonstrate their value to their constituents by gaining various concessions, while administrations are obviously under pressure to grant something at the bargaining table. Citing the case of St. John's University as an example, he posits a tendency for administrators to favor concessions on salary increases rather than concessions on such items as increased

governance, further codification of faculty prerogatives, lower student faculty ratios, or reduced class size, many of which have direct implications for educational quality. It is possible that administrators, unions, faculty senates, and governing boards may work in consort to resist any incremental decline in the integrity of the educational enterprise which might occur through the expediency of resolving a set of issues at the bargaining table. Nevertheless, this potential problem must be addressed in any full discussion of issues which may arise out of collective bargaining. Whether the collegiate atmosphere is seen as changing for better or worse will, undoubtedly, be colored by the perspectives of those involved. Quantitative factors such as student/faculty ratios, contact hours, class size, grade point averages, course loads, and costs of instruction lend themselves persuasively to neat arrays in charts and tables, but other more important factors of quality including academic integrity, collegiality, faculty initiative, student motivation and intellectual climate are not so easy to assess. Whatever specific trends and outcomes may result from unionization, faculty, administrators, and State policy makers must not lose sight of the more elusive qualitative factors as they attempt to identify and cope with the goals and purposes of education in a future filled with the uncertainties of collective bargaining.

FACULTY AFFIRMATIVE ACTION IN CALIFORNIA HIGHER EDUCATION

In the past few years, considerable national attention has been focused on the successes--and failures--of affirmative action policies and programs for college and university faculty. Numerous observers have analyzed the regulations and actual employment practices, as revealed by the increasing volume of sex and ethnicity data. (See, for example, American Association of University Women, 1978; Gappa and Uehling, 1979; Loeb, Ferber, and Lowery, 1978; Rodriguez, 1978; and Wasserman, 1975). Their findings lead to one general and inescapable conclusion: while some gains have been made, the picture for minorities, and especially for women, has not changed all that greatly, despite government regulations, affirmative action programs, and considerable litigation.

In California too, attention has been focused on affirmative action in higher education, particularly on those efforts and their results in the three public segments. In order that an orderly accounting might be made to the Legislature of the sex and ethnicity of faculty and staff in the public segments, Assembly Bill 105 (Hughes) was enacted in 1977, (now Education Code Chapter 399, Section 66903) and directs the Commission to report to the Legislature and Governor on the employment, classification, and compensation of ethnic

minorities and women in the three public segments. Also included is data concerning new hires, promotions, and separations of women and minorities in the public segments.

In March 1981, the Commission responded with its first full report on Women and Minorities in California Public Postsecondary Education: Their Employment, Classification, and Compensation, 1977-1979. The report makes the following general observations about the public segment faculty statewide:

> While the tenured faculty statewide is still predominantly white and male, small increases in the proportions of women and ethnic minorities among the tenured faculty occurred between 1977 and 1979. The proportions of women and ethnic minorities among the on-track for tenure faculty, however, decreased over the two-year period. In the "other" faculty category (which includes such persons as visiting faculty, faculty on short-term contracts, Agricultural and Cooperative Extension faculty, and librarians), the proportion of women increased as did that of minority males. Ethnic minority females held the same percentage of the "other" faculty category in 1979 as they did in 1977 (1981d, p. ii).

Considerable variation exists, however, between the trends for tenured as compared to nontenured faculty.

Trends for Tenured and Nontenured Faculty

Of the full-time faculty statewide in 1979, 70.9 percent were tenured, as contrasted with 66.8 percent in 1977. Males constituted 77.3 percent of the tenured faculty in 1979, a slight decrease from 78.2 percent in 1977. Females constituted 22.7 percent of the tenured faculty in 1979, as compared to 21.8 percent in 1977. White males comprised 69.4 percent of the tenured faculty in 1979, again a slight decrease from 70.9 percent in 1977. White females made up 19.5 percent of this category in 1979, as compared to 19.0 percent in 1977. Ethnic minority males were 7.9 percent of the tenured faculty in 1979, as compared to 7.3 percent in 1977. Ethnic minority females constituted 3.2 percent of the tenured faculty statewide in 1979; in 1977, the figure was 2.8 percent. Thus in 1979, the tenured faculty was still predominantly male and predominantly white, although there have been slight increases for women and ethnic minorities.

Faculty who were not yet tenured but were "on-track" for tenure constituted 9.2 percent of the faculty statewide in 1979; in 1977, the figure was 11.5 percent. Of the on-track group, males comprised 67.3 percent in 1979, up from 65.7 percent in 1977. Women

constituted 32.7 percent of the on-track for tenure faculty in 1979, down from 34.3 percent in 1977. In 1979, ethnic minority males were 10.7 percent of the on-track faculty, compared to 11.2 percent in 1977. Ethnic minority females comprised 6.1 percent of the on-track group in 1979, while they were 6.9 percent in 1977. Thus, both women and ethnic minorities showed increases in the tenured faculty ranks in both numbers and proportions from 1977 to 1979, and decreases in the on-track for tenure category. While this could indicate that there has been a movement of women and minority faculty from the on-track ranks into the ranks of fully tenured faculty, it could also indicate an increase in separations of women and minority faculty from the on-track for tenure faculty ranks.

The full-time "Other Faculty" category includes such persons as visiting faculty, faculty on short-term contracts, Agricultural and Cooperative Extension faculty, and librarians. The largest number of faculty in this category are found in the University (6,745 of the 8,170 statewide total "Other" faculty in 1979). In 1979, males constituted 70.0 percent of the Other Faculty category, compared to 71.8 percent in 1977. Women comprised 30.0 percent of the Other Faculty category in 1979, up from 28.2 percent of this category in 1977. Ethnic minority males constituted 10.1 percent of the Other Faculty category in 1979, up from 9.9 percent in 1977, while ethnic minority females comprised 4.7 percent--the same percentage they held in 1977.

Of all male, full-time faculty statewide in 1979, 73.1 percent were tenured, as compared to 64.2 percent of all women faculty. In 1977, the figures for men and women faculty were 69.3 percent and 59.1 percent, respectively. Of the ethnic minority male faculty statewide in 1979, 65.1 percent were tenured, compared to 58.7 percent in 1977. In 1979, 60.5 percent of ethnic minority female faculty were tenured, as compared to 50.4 percent in 1977. Thus, while the tenured faculty was still predominantly white and male, gains in tenure status had been made by both women and ethnic minorities over the two-year period, with the greatest increase to tenured status occurring for female ethnic minorities.

Trends in Compensation of Eleven-Month Faculty

Statewide, in the Faculty category in 1979, there were 9,348 persons employed on an eleven-month basis, a decline from 9,927 in 1977. (The majority of faculty statewide teach on an academic year of nine months and will be discussed below.) In 1979, the single largest concentration of male faculty (38.6%) was in the $30,000 and above range; in 1977, the figure had been 27.1 percent. Women in the eleven-month Faculty category in 1979 continued to cluster mainly in the $19,000 to $24,999 range (37.0%), as they had in 1977 (38.3%).

Only 17.4 percent of women faculty on eleven-month appointments received salaries of $30,000 or more in 1979, although this was double the 8.8 percent of female faculty who were at that level in 1977. Of white males, 40.6 percent were in the $30,000 and above range in 1979; in 1977, the figure was 28.7 percent. Of white females, 18.5 percent were in the top salary category in 1979, which was double their percentage in that category in 1977 (9.3%). Of ethnic minority males, 24.7 percent received $30,000 or more in 1979, as compared to 15.6 percent in 1977. Of ethnic minority females, 11.6 percent earned $30,000 or more in 1979, which was nearly double their 6.0 percent in 1977. (It should be noted, however, that of the 3,143 eleven-month faculty who earned $30,000 or more in 1979, only 42 were ethnic minority women.)

Trends in Compensation of Nine-Month Faculty

In the statewide Faculty category in 1979, there were 31,340 persons employed on the standard nine-month academic-year contract of two semesters or three quarters of teaching, a decline from the 31,879 so employed in 1977. Of all faculty statewide in 1979, 24.9 percent made salaries of $30,000 or more--a dramatic increase over the 3.2 percent of faculty who were in that salary range in 1977. (Whether these large increases in the proportion of faculty earning $30,000 or more are due mainly to the promotions and step increases, or to the considerable across-the-board salary increases that occurred between 1977 and 1979 is difficult to determine.) In 1979, the single largest concentration of male faculty (33.5%) was in the $25,000 to $29,999 range, whereas in 1977, it had been in the $19,000 to $24,999 range (42.6%). Women in the nine-month Faculty category in 1979 continued to cluster in the $19,000 to $24,999 range (41.9%), as they had in 1977 (42.0%). In the top salary range of $30,000 and above, the percentage of male faculty increased dramatically from 4.2 percent in 1977, to 29.5 percent in 1979. Similarly, female faculty increased their percentage in the top salary range from 0.5 percent in 1977, to 11.3 percent in 1979. While white males were clustered primarily in the $25,000 to $29,999 range in 1979 (34.2%), white females and both male and female ethnic minorities were clustered one range lower at $19,000 to $24,999 (with percentages of 40.8%, 43.7% and 48.5%, respectively). In 1979, 18.5 percent of minority males were in the $30,000 and above salary range, as compared to 2.6 percent in 1977. Among ethnic minority female faculty in 1979, 6.1 percent were in the top salary range, compared to 0.2 percent in 1977. (In actual numbers, minorities in this range increased from 67 in 1977 to 552 in 1979, with men increasing from 65 to 480 and women from 2 to 72.)

A somewhat different set of data on faculty compensation is collected in the Higher Education General Information Survey (HEGIS) and

reported annually in the Commission's Information Digest. (These data are also for full-time faculty only.) The 1981 Information Digest provides this information as "mean salaries," and has such information only by sex. The 1981 Digest indicates that for Fall 1980, the average salary of female Community College faculty ($27,837) was exceeded by that of male faculty ($29,273). This was also the case in the State University and Colleges where the all ranks average salary of males was $29,739 as compared to an average salary of $26,360 for females. At the University, the average salary of male faculty in 1980 ($33,006) exceeded the average salary for female faculty ($25,789) by 28 percent. Only in the instructor ranks at the State University did average salaries of women exceed those of men: everywhere else, average salaries for men were greater than those for women.

Although averaged salary data tend to mask important differences in male and female faculty salaries and indicate nothing about the possible reasons for such differences, many national studies have shown that "when factors influencing salary--degree, rank, years of employment--were controlled statistically, women on the average received $3,000 less in salary than men" (Shulman, 1979, p. 32). Other salary studies have also found that "differences due to sex were much greater than those due to race, and that women were paid less than men in almost every combination of field and type of institution, regardless of race" (Gappa and Uehling, 1979, p. 54). Indeed, "the evidence points overwhelmingly to the conclusion that regardless of which variables are analyzed, or what reasons for differences are explored, women faculty are paid less than their equivalent male counterparts and that such salary differentials are traditional in higher education" (ibid.).

Policy Issues

The picture of affirmative action for California's higher education faculty is similar to that in the rest of the country--a record of some successes and some setbacks. The negative aspects of this picture may increase, however, if stable or declining enrollments and fiscal constraints become permanent fixtures of the postsecondary education environment of the 1980s. This prospect raises some major policy issues. First, if the higher education community is in fact committed to affirmative action, how can it achieve its goals in face of stable and declining enrollments and relatively few faculty openings? Second, how do current tenure policies and practices affect affirmative action? Third, given the projections of increasing enrollments of women and ethnic minority students in higher education, will the higher education community be able to provide the necessary faculty role models so vital to the success of these students? Fourth, will the advent of collective

bargaining in all three public segments serve to increase or decrease the flexibility campuses may need to avoid the "last hired, first fired" syndrome, in case staff reductions are required? Can such options as phased retirement and position sharing be used to aid in affirmative action? And finally, is there anything the State can do--in terms of inducements or sanctions--to redress the problem of inequitable compensation for women and ethnic minorities who are already faculty members?

The resolution of these issues will require more than the traditional "good faith" efforts; it will also require a serious examination of the faculty personnel inequities in higher education. The progress to this point has not been encouraging and the decade ahead may contain some new obstacles to affirmative action. Vigorous efforts and creative approaches will be needed in order to achieve the broad goal of equity for faculty and staff in public higher education.

PART-TIME FACULTY

In times of enrollment uncertainties in higher education, the use of part-time faculty becomes a matter of particular importance. A study by the National Center for Education Statistics in 1978 indicated that, over a four-year period, the number of full-time faculty members in the nation's four-year colleges and universities grew by 9 percent, while the number of part-time faculty increased by 38 percent. In two-year colleges, this four-year trend was even more dramatic: while the number of full-time faculty grew by 11 percent, the number of part-time faculty increased by 80 percent (see "Part-Time Professors on the Increase," 1978).

In California's three public segments, the pattern is similar. In the Community Colleges, part-time faculty accounted for an estimated 30 percent of the weekly faculty contact hours during 1980-81. Of the 18,000 faculty in the State University, approximately 6,500 were working on a part-time basis, accounting for more than 2,000 full-time positions. Within the University, specific data on part-time faculty are not readily available because various kinds of split appointments and research titles allow for several conceptions of "part timeness." Yet, in spite of the variability among the public segments, one general conclusion is clear: part-time faculty members have been a significant part of the teaching force in recent years and, by all indications, they will continue to play a large role in the future.

Given this brief profile of the growth of part-time faculty employment in California postsecondary education, a number of specific matters can be identified and subsumed under three general

headings of issues that need to be faced in planning for the remainder of the 1980s: (1) faculty and program quality, (2) "critical mass," and (3) compensation.

Faculty and Program Quality

There is no inherent reason why part-time faculty should be prejudged as being members of the "second team," to be brought in as substitutes for the full-time faculty. Part-time faculty can be an asset to any academic program. In fact, in many instances they can provide special qualifications, professional maturity, and field experience, all of which are a stimulating complement to the students' contact with their more traditional full-time faculty (Ernst and McFarlane, 1978). In the medical schools of the University, for example, practicing physicians with part-time faculty appointments make great contributions to the students' education. Similar instances of enriched curricula and courses can be cited in all of the public segments. Additionally, in the Community Colleges, approximately six percent of the instruction is done on a "part-time" basis by full-time faculty who are teaching extra courses on an overload basis. The popular stereotype of a part-time faculty member as a second rate educator, in sum, simply doesn't hold up.

As long as those who hire part-time faculty members are concerned with the individual's academic and/or professional qualifications, knowledge of academic standards and objectives, commitment to teaching, and ability as a teacher, the institution can fulfill its purposes. Concern arises, however, when these standards are diluted or compromised. In recent years, campus administrators, under various economic and staffing pressures, have sought ways to retain needed flexibility through the use of part-time faculty. Yet, when faculty members are hired on a part-time basis principally because they are less expensive, or because they have more accommodating schedules, students and indeed the entire educational enterprise are short-changed if quality is compromised in the interests of economy.

Critical Mass

Given that employing a certain percentage of part-time faculty may be necessary, even desirable for the best of reasons, how many can an institution absorb before the overall quality of the educational program suffers? In other words, what is the "critical mass" for part-time faculty on a particular campus? While there may be no completely satisfactory answer to this question, two national studies found some important differences at four-year institutions between full-time and part-time faculty in respect to the work they

do: "part timers as a group do less administrative work, do less student advising, have fewer teaching preparations, instruct a more homogeneous student clientele, and work more on an intermittent basis. A full timer, in contrast, is more likely to . . . be assigned roles that include multiple functions" (Kellams and Kyre, 1978, p. 39). If these findings can be generalized--and there is every reason to believe that they can --it follows that, as the proportion of part-time faculty increases, the institutional workload of the full-time faculty also increases. Of course, it is impossible to say at what point teaching, advising, scholarship, course preparation, and general commitment to program and campus goals would suffer. That they will at some point, however, seems clear. This problem may become especially acute in the Community Colleges, where a significant amount of instruction is already being done by part-time faculty.

Compensation

In terms of compensation, part-time faculty members generally work for less money than their full-time counterparts and they receive no fringe benefits. This fact is one of the reasons why part-time faculty are attractive and why their numbers are increasing. In too many instances, campuses appear to be capitalizing on the current seller's market for faculty, making a greater use of faculty who are willing to work part time for low wages, either because of financial need or to gain experience or, perhaps, in the hope that a part-time opportunity will develop into a full-time position at some stage in the future. Once again, it is difficult to identify the boundary between the legitimate administrative need for staffing flexibility on the one hand and the inclination to use part-time faculty for the purpose of salary savings on the other. There are signs, however, that part-time faculty members have begun to ask for more equitable treatment, and various legislative proposals have been introduced in an effort to deal with some of these problems in the Community Colleges, where the need is most extensive. One proposal would limit the percentage of part-time instructors that a district could hire; another would make a distinction between ADA taught by full-time faculty and ADA generated by part-time faculty. In addition, the Legislature is discussing the issues of pro-rata pay, tenure, and security of employment for part-time faculty in the Community Colleges. If such legislative proposals become law, it is possible that similar legislation could be proposed by part-time faculty in the other two public segments.

FACULTY MOBILITY, DEVELOPMENT, AND RETIREMENT

Several forces have converged to dramatically alter certain dimensions of faculty life, including their mobility, development and retirement. The demographics show stabilized or declining enrollments through the 1980s, and educational institutions are being forced increasingly to compete with other social priorities for ever-scarcer funding. In addition, the production of new doctorates has outpaced the demand for such highly-trained professionals in almost every field, resulting in a shrinking academic job market. By 1982, the surplus of supply to demand in new doctorates may be more than 16 percent; by 1986, the figure is predicted to be over 36 percent. The long-term picture is no better: recent statistics show virtually no growth in the faculty job market through the year 2000 (Shulman, 1979, p. 3).

The oversupply of doctorates is not the only problem. The growing ratio of tenured to nontenured faculty and the increasing faculty age profile are both factors that affect academic job mobility. Nationally, the ratio of tenured to nontenured faculty has been rising steadily: it is estimated that, under current practices, the percentage of tenured faculty could reach 90 percent by 1990 (Leslie and Miller, 1974). In California, the percentage of full-time, regular ranks faculty who were tenured in 1980 was 79 percent at the University, 80 percent at the State University, and 92 percent at the Community Colleges (California Postsecondary Education Commission, 1981c, Displays FAC-1, 4, and 6).

Because most current faculty were hired during the growth period of the 1950s and '60s and are now in their thirties, forties, and fifties, their relative youth presents another barrier to faculty job mobility, since relatively few openings can be expected as a result of retirement. Ladd and Lipset report that: "The median age of faculty. . .was 39 in 1970, will increase to 48 by 1990. . .. The dramatic change between today and 1990 would be the virtual disappearance of the under 35 age group from the teaching ranks" (in Shulman, 1979, p. 21). The average age of full-time faculty at the University of California varies depending upon the age of the campus; it ranges from an average of forty years at the Santa Cruz campus to forty-six years at the Berkeley campus. At the State University, the average age of full-time faculty is forty-five years.

Effects of Reduced Mobility

The high percentage of tenured faculty acts as a barrier to the hiring of "new blood"; in addition, the older tenured faculty may be in departments or disciplines which are experiencing low student

demand, creating serious problems with regard to institutional flexibility.

Decreased faculty mobility also has negative implications for affirmative action. At a time when the increasing number of women and ethnic minority doctorate holders is making the achievement of affirmative action goals a possibility, the low mobility of faculty and the few new openings are acting as barriers to the hiring of these new, young Ph.D.s. This is particularly distressing since it is these new faculty members who could best provide positive role models for the new students of the eighties--many of whom will be women and ethnic minorities.

Another negative factor affecting faculty job mobility consists of the 1978 Amendments to the Age Discrimination in Employment Act (AADEA). This federal legislation, which raises the minimum age for mandatory retirement from 65 to 70, serves to heighten many of the effects of the factors already cited: if older faculty decide to teach until age 70, even fewer openings will be available for new faculty, either for affirmative action efforts, or for responding to shifts in student demand.

The effects of deferred retirements on any particular institution depend to a great extent upon the age profile of the faculty at that institution. In some institutions, the effects of this law may not be felt until the late 1980s or 1990s; in others, the law may have more immediate effects on expected attrition rates (Jenny, Heim, and Hughes, 1979). At the University of California, the rate of turnover due to retirement and death is an estimated 1.5 percent per year; at the State University, the rate is approximately 3 percent. Given the relative youth of the faculties in these two segments, the effects of the new retirement law will not be felt for some time. In addition, both the University and State University report that inflation--which may force more faculty to remain longer--will have a greater effect on faculty attrition rates than the new retirement law. In order to counteract these factors, it can be expected that all of the segments will begin to develop greater flexibility in respect to early or partial retirement.

One final effect of low job mobility is its negative effect on faculty morale. There is a sense of reduced personal opportunity, since the chance of being hired by a competing institution or of exercising "academic entrepreneurship" is now substantially less than it once was (Kerschling, 1978, p. viii). There is also disappointment, since many faculty entered their current positions expecting upward mobility, but as Eric Solomon notes, this aspect of the academic career has largely disappeared: "many of us were originally attracted to the profession by its peripatetic aspect . . . . At the present time. . . the first teaching job will

probably stretch into 40 years of routine unbroken by the illusion or reality of greener fields" (in Shulman, 1979, p. 23).

Institutional Responses

Perhaps because of the pervasive effects of low faculty job mobility, institutions are beginning to develop new approaches and programs to deal with the "steady state" in faculty hiring. Various approaches are being tried, including: tying promotion, tenure, and merit increases more directly to departmental and institutional objectives; attempting to establish a closer fit between special faculty talents and interests and teaching assignments; paying more attention to establishing faculty development programs; and establishing programs that assist faculty in coping with the new stresses endemic to the academic environment of the 1980s (Kirschling, p. ix). Two less direct, but important means of adapting to the lack of attrition include incentive programs to increase early retirements and programs to retrain faculty for new careers, either within or outside academia.

These last two options--early retirement and mid-career change--are now being considered by an increasing number of institutions. Incentives for early retirement can include some form of severance pay, such as lump sum payments, a year's salary, increased annuities, or reduced workload options (phased retirement). Programs to facilitate mid-career change include intern and fellowship programs that place faculty in close touch with alternative careers outside academia, and specific faculty retraining programs, which can vary from retraining for an allied specialty within the discipline to training for an entirely new discipline. Such retraining programs give institutions the flexibility to reallocate faculty resources to more productive uses.

After studying the options of early retirement and mid-career change, Carl V. Patton made the following observations. First, early retirement programs will not dramatically affect the number of faculty vacancies in the near future; however, they may make it possible to make some very selective and important replacements. Second, the costs associated with early retirement programs can be high, and institutions need to consider the age composition of their faculties by field, annual and expected attrition rates, and tenure-granting rates before adopting an early retirement program. Third, programs that bring faculty in contact with alternative careers are more likely to effect career change than are overt efforts to encourage such change. Fourth, while costs of faculty retraining programs are relatively small and prospects for increased future productivity are attractive, it is difficult to attract faculty to such programs (1978).

It seems dramatically clear that the factors of faculty mobility, retirement, and faculty development will increasingly affect the economic flexibility of higher education institutions in the 1980s. The ability of faculty members to change, to grow, and to be innovative in response to changing demands, will play a major role in determining institutional flexibility and vitality. Many have postulated the negative effects of this combination of factors, but there also may be a more optimistic aspect. That an older, more "tenured-in" faculty would tend to decrease institutional flexibility and vitality seems logical. Yet Leslie and Miller argue that it is possible that this relationship may have been overestimated, if it is correct at all:

> One dissenting view holds that effectiveness in the professions and indeed in higher education appears to be much more dependent upon experience, knowledge, wisdom, and maturity than on youthful vigor. . . Another investigator has shown that age and academic rank correlate neither with the lack of adaptiveness to social demands, with inadequate performance in class, nor with failure to undertake reform. Rather, the relationship tends in the positive direction, indicating that performance, adaptation, and thoughts of reform increase with rank and age (1974, pp. 30-31).

Whether this view, or the more negative one, proves to be the more correct, the factors of faculty job mobility, retirement, and development will continue to influence the higher education environment well into the next decade--and probably beyond.

THE 1980s ENVIRONMENT FOR CALIFORNIA POSTSECONDARY EDUCATION

INTRODUCTION

"The Era of Limits," "The Age of Austerity," "A Decade of Scarcity"--each of these appellations has been used to describe the current and future environment of the 1980s. Across the nation, energy costs are rising rapidly, inflation is high, the economy is sagging, and public trust in government and traditional institutions is low. While many economists believe that California will not be affected as severely as other parts of the nation, due both to its attractive location and relatively strong economy, California taxpayers have served notice on both State and local governments that the future will not be "business as usual" and that fiscal austerity--at least in relation to government appropriations and expenditures--is likely to be the watchword of the coming decade.

Postsecondary education, of course, exists within the economic, political, and social environment of the State, and must, therefore, respond to alterations in that environment. Various forces--both those external to postsecondary education and largely beyond its control, and those internal to the system itself--are at work in the environment and are shaping the future with which postsecondary education must be prepared to cope.

The external environmental forces influencing postsecondary education can be divided into three not necessarily exclusive categories of factors: demographic factors; economic factors; and socio-political factors. The demographic factors include such predictable indicators as the actual and projected size of California's population, the changing age mix of the population, and its increasing ethnicity. Economic factors include statutory limits on government spending, a high rate of inflation, rising energy costs, and uncertain job opportunities for college graduates. The socio-political factors include variable political support for postsecondary education, increased legislative involvement, demands for increased accountability, desires for social justice and expanded access, concerns about the maintenance of program quality and academic standards, and competition from other State priorities for public funds.

Those forces that are internal to the postsecondary education system itself can largely be divided into two major categories--economic factors and socio-political factors. The internal forces are those over which the system or institution has at least a modicum of control, although the ability of the institution or system to effect changes in the operation of these factors may be doubtful. The internal economic factors include enrollment-driven funding formulas, increasing plant and maintenance costs, faculty compensation, reduction or reallocation of resources, employee benefit costs, and accountability and compliance costs of State and federal mandates. The socio-political factors cover a wide range and include: collective bargaining; efforts at affirmative action; tenure provisions; the need to respond to the "new clientele;" poor preparation of entering students and the concomitant demands for remediation; the need to maintain quality and standards; and pressures for increased centralization of authority and management, in the face of demands for institutional autonomy.

The extent to which educational leaders understand and prepare for the impact of these environmental forces will determine in large part whether California's postsecondary education system copes successfully with change during the 1980s.

EXTERNAL ENVIRONMENTAL FORCES

An Aging Population

California's population is expected to continue to increase throughout the 1980s, due in part to the State's location in the "sunbelt" and to its widely diversified economy. However, in terms of effects upon postsecondary education, it is the age mix of the State's population, and not just its size, that is the more important trend. The age profile of the State's population will result in the following:

- The total college-age population of 18-24 year olds is projected to decline from a peak of 2.9 million in 1982 to a low of about 2.45 million in 1992.
- The young adult population of 25-34 year olds, which is made up of the post-World War II babies, will continue to grow until it is nearly double the size of the 18-24 year old population in the early 1990s.
- The older adult population (65 and above) will outnumber the college-age cohort by the mid-1980s for the first time since 1962.

Whether the increased numbers of adults will make up for the projected decline in the 18-24 year old enrollment in postsecondary education remains doubtful, since the majority of adults attending colleges and universities enroll part time, often in non-degree, non-credit courses and programs, and have a wide variety of non-collegiate educational opportunities open to them through business, industry, labor union, government, and community programs.

Among the likely effects of this aging population will be demands by older students to make postsecondary education meet their needs. As Lyman Glenny notes (1978, p. 3), "the people in this age group are the labor force, the taxpayers and the voters, and they will play those roles in making demands on public officials for what they consider to be the necessities for 'their' colleges and universities. The college student can be considered less and less a non-voting youth and more and more a policy-influencing citizen."

A Majority of Minorities

The growing number of ethnic minorities in California's population will make California the first majority ethnic minority state by the 1990s. Indeed, the University of California has projected that by 1990, the combined enrollments of minorities in California's public schools will be 25 percent greater than the Anglo enrollment (University of California, 1980, pp. B 1-6). This demographic factor has three related variables which could influence the participation of minorities in California's postsecondary education system. First, except for Asians, minority students generally have a lower rate of persistence in high school, a lower eligibility rate for entering college, and more severe English-language problems. The effects of these factors result in lower participation rates for minorities in postsecondary education, which, as their groups become proportionately larger in the State's population, could negatively affect statewide enrollments and limit the opportunity of minority youth for advancement in work and society.

Combined with the changing age mix of the population and the decline in the number of traditional college-age youth, the increasing ethnicity of the population will result in differential effects depending upon the type of postsecondary institution, its admission policies, and its clientele. Some institutions may lose a substantial portion of their enrollments; others may grow, particularly if they can meet the needs of a changing clientele; but all the institutions will feel at least some of the effects of the changing demographics on the postsecondary education environment.

Inadequate Preparation for College

Related to the demographic factor of the increasing proportion of minorities in California's population, are the issues arising from the relatively poor quality elementary and secondary education which minorities receive, and their subsequent lack of preparation to undertake college-level courses. However, far from being uniquely a problem for minority students, lack of adequate collegiate preparation now affects students from all socio-economic and ethnic backgrounds. The recognition of this problem has caused many colleges and universities to initiate remedial courses and programs, at a considerable cost both financially and in terms of program quality. At the same time, some members of the public and the Legislature, as well as some faculty members, feel that such remediation has no place in the collegiate environment, and that such developmental work should be done at the K-12 level. The Commission has begun a study of the nature, extent, and cost of providing remediation in California's public postsecondary institutions that will seek to identify and resolve some of the difficult questions surrounding the problems of inadequate student preparation and the need for remediation.

Continued Inflation

There is considerable disagreement among economists as to how the nation's economy will weather the 1980s. Some, like Richard Russell, publisher of the "Dow Theory Letters," foresee the need to take serious steps to get the economy and inflation under control, steps that include tremendous cuts in government spending, severe cuts in welfare, and a return to the "severe austerity" of Depression days. Others, such as Warren Johnson, author of Muddling Toward Frugality, see a more human, more frugal society, with people using more labor to save energy and raw materials, experimenting with carpentry, gardening, and plumbing on their own.

There is, however, substantial agreement about the inevitability of inflation, even if recent double-digit inflation gradually moderates. The effects of inflation on California's postsecondary education system can already be seen: increasing costs of plant and maintenance, utilities, supplies and textbooks, and demands for increases in employee compensation and benefits to keep pace with rising prices. Administrators in a recent survey noted that between 1965 and 1975, the Consumer Price Index increased at an average rate of about 3.6 percent a year, while the Halstead Higher Education Price Index increased at about 5.3 percent per year. The major point to be made is that "the portion of institutional budgets required for relatively fixed costs of equipment, supplies, and maintenance has been increasing more rapidly than have the specific funds available for them" (Bowen and Glenny, 1980, p. 3).

Increasing Energy Costs

The cost of energy is perhaps the single greatest factor causing inflation. In California, transportation accounts for 42 percent of the total amount of energy consumed in the State, and gasoline costs have increased some 150 percent over the last six years. With the increase in energy costs, the costs of operating postsecondary education institutions will increase: heating, air conditioning, and other utilities will be more expensive, and costs of operating university vehicles will increase. Perhaps most serious is the effect of escalating gasoline prices on student transportation, since many of our California institutions are "commuter campuses." Revised course schedules, off-campus classes and programs, and the use of televised courses may become more prevalent parts of the postsecondary institution as a response to the energy crisis.

Changing Student Interests

One economic factor that is closely related to postsecondary education is the condition of the labor market and the employment outlook for college graduates. Higher education has not been particularly adept at matching its output of graduates to trends in the labor market, as witnessed by the oversupplying of education and liberal arts graduates in the 1970s. Those institutions that focus on vocational and technical training, and those graduate programs linked directly to the professions, have had more success in producing employable graduates, and have thus enjoyed an upsurge in enrollments. The shift in student interest and demand from the humanities to more occupationally oriented programs is now a statistically demonstrable factor that must be taken into account in academic planning, as must the labor market projections that influence student choice. However, even when an institution is fully cognizant of both the labor market projections and the shifts in student demand, it may be extremely difficult to reallocate resources from the overstaffed and underenrolled humanities programs to the high-demand, high-cost professional and technological programs. Thus, while enrollments have recently increased nationally more than 50 percent in professional fields of study, colleges and universities were able to increase faculty resources in these fields by only 15 percent. Conversely, while majors in the social sciences declined by more than 50 percent, faculty resources in this area were not reduced at all (Millett, 1979, p. 11). While it may be easy to talk about reallocating resources to respond to labor market demand and shifts in student choice, it may be extremely difficult to accomplish.

The Erratic Fiscal Environment

Perhaps the most important economic factor facing California postsecondary education in the 1980s is that of the State's erratic fiscal environment. Faced with a State surplus in the billions of dollars in 1978, California taxpayers demanded a cut in property taxes and limitations in government spending, and got both, through Propositions 13 and 4. The impact of these factors on California's public postsecondary system is readily apparent:

- In the University, unspecified budgetary reductions as a result of Proposition 13 amounted to some $15.4 million in 1978-79 and an additional $1.3 million in 1979-80.
- In the State University, reductions related to Proposition 13 amounted to $14 million in 1978-79, and, after one-time supplemental funding, an additional $1 million in 1979-80.
- In the Community Colleges, Proposition 13 meant radically new, complex, and often confusing funding conditions under SB 154 and AB 8. The consequences for each college and district varied widely, but for all of them support has shifted from local to State funding and become dependent on enrollment.

A "no growth" situation in State expenditures is likely in the near future, as a result of the State's having used its budget surplus to "bail out" local government and K-12 school districts since Proposition 13. The effects of no growth in State resources combined with increased competition for these resources from an expanding array of social programs, could have negative effects on the amount of State resources allocated to postsecondary education.

Public Opinion

Public opinion about postsecondary education--its merits, its benefits to the individual and to society at large--is of considerable importance to the educational enterprise. Individual decisions to attend college, collective decisions to support colleges, and the attitudes of legislators toward the postsecondary system, are all influenced by the public's attitudes toward the State's system of education. During the 1970s, postsecondary education--indeed, education in general--suffered some decline in public support, as part of the increasing public skepticism about the integrity of its various political and social institutions. However, public opinion polls indicate that during this time the public did not waver significantly in its opinion that education itself was a high priority; it did, however, question whether public education was as accountable for its expenditures of public funds as it should be

and whether it was managed as effectively and efficiently as possible. Along with these concerns came concerns about educational quality, academic standards, and the integrity of degrees offered by traditional and non-traditional institutions alike.

In discussing the hostility of both the general public and those in government to colleges and universities during the student uprisings of the late sixties, Martin Trow writes that the hostility came from both the right and the left: "from the right for allowing and indeed even encouraging political protests on campus;" and from the left for being elitist institutions, stubbornly defending traditional academic standards, favoring privileged groups in society, and discriminating against the poor and minorities. "These feelings," Trow continues, "have in many state legislatures led to an odd coalition of conservatives and liberals who agree, if not on what the character of higher education should be, then at least on the principle that the State or 'the people' should have more to say about the functions and management of the public colleges and universities" (1975, pp. 116-117).

Increased Regulation

Both federal and state governments have seen fit to play a greater role than ever before in ensuring the accountability of postsecondary education to the public--or at least to federal and state political concerns. Statutes and regulations concerning virtually every aspect of education--from the statutory statement of the eligibility pool from which an institution may draw its students, through its funding for specific programs, to the sex and ethnicity of its faculty and administration--are now the rule rather than the exception. While one may argue that the postsecondary education system would not be appropriately accountable for its expenditures, nor be willing to make efforts in affirmative action without the various government mandates, it is also important to remember that such demands for accountability involve considerable costs--costs which, in public institutions, are ultimately borne by the taxpayers. Bowen and Glenny, in their 1979 study on responses to stress at ten California colleges and universities, note the following about public and legislative desires for increased accountability: "No one with whom reporting requirements were discussed disputed the rights of the state and federal governments to require accounting for the expenditure of public funds . . . at all campuses and districts, however, there was serious concern over the cumulative impact of these requirements in the face of rising costs and diminishing revenues" (Bowen and Glenny, 1980, p. 5). The need for postsecondary institutions to be accountable for expenditures of public funds, and to be responsive to the public--and the legislative--interest, must be balanced by a clear understanding of the

costs of compliance, costs which may ultimately affect the educational program. Consideration should be given to the necessity for and benefits of increased accountability, as compared to the costs of such accountability, before new regulations are imposed upon postsecondary institutions.

Social Justice and Affirmative Action

One of the major socio-political factors which has influenced postsecondary education to a considerable extent over the past decade, has been the public desire for social justice, for an expansion of access to postsecondary education that would help achieve the national goal of equality for all. Education, particularly in the late sixties, was seen as the most important means to the ends of social justice and full participation of minorities in American life. More recently, the women's movement and the changing role of women in American society have led to increased concern on the part of women for access to and participation in all levels and types of postsecondary education. While there have been notable successes in expanding access to an increasingly diverse student clientele over the past decade, the goal of equitable participation has not been reached. As noted earlier, while California will become America's first "majority ethnic minority state" in the 1990s, minorities still graduate from high school in much smaller numbers than white students, become eligible for the University of California at a much lower rate, and have a higher attrition rate from the University once enrolled. And while women now represent over half the undergraduate enrollments in California's public colleges and universities, they are still seriously underrepresented in many graduate and professional schools.

While the public's desire for social justice has moderated considerably from that expressed in the late sixties, the demands from the various new student clienteles have increased. Women, ethnic minorities, older adults, and the handicapped will continue to constitute an increasing proportion of the available clientele for postsecondary education. Some institutions are moving to meet the expressed needs of these new students; others believe that the students must equip themselves to meet the traditional academic standards and program requirements in order to be really accepted as educated persons. Whatever the current responses of postsecondary institutions to this new clientele, one fact remains clear: it is these students who will constitute the bulk of the persons from which postsecondary education will draw its students in the next decade. This fact must be taken into account in planning for the future of postsecondary education in this State.

Increasing Competition for State Funds

Perhaps the major external, socio-political factor which will influence the future of postsecondary education in California is that of competition for increasingly scarce State resources from other socially important priorities. As the population ages, the needs for health care will increase and the costs will grow. Improved pensions and adequate retirement benefits will be demanded. As more linguistically different populations enter California, demands for bilingual and bicultural elementary and secondary education will increase. These and other social priorities will compete with postsecondary education for available State funds--at a time when the continued availability of those funds is uncertain, due to pressure from the working and middle classes for tax relief. Whether postsecondary education will maintain its share of the State budget in the face of competition from other social priorities remains to be seen.

INTERNAL ENVIRONMENTAL FACTORS

Enrollment-Driven Funding Formulas

The fact that California's public colleges and universities are funded on an enrollment-driven formula basis is perhaps the chief internal economic factor affecting the system. During the past decades, enrollment growth in public postsecondary education was increasing steadily, with dramatic jumps in enrollments during the sixties. As long as enrollments increased, funding increased, keeping the institutions capable of meeting their growing needs for buildings, faculty, and student services. The fact that funding was tied to enrollments even masked the effects of inflation: as Bowen and Glenny report, "One senior administrator suggested that he and others had become so accustomed to rapid enrollment growth that they 'failed to recognize the degree to which they had become dependent on dollars appropriated to cope with increased enrollments to offset concurrent but unrelated problems resulting from inflation'" (Bowen and Glenny, 1980, pp. 2-3).

Now that enrollments are either stabilizing or declining, those dollars are no longer available to offset inflation. The formulas which were so profitable to institutions as they grew are causing problems for them in this era of no growth or decline in enrollments. Since many institutional costs will continue even if enrollment declines, dollars cannot be taken away on the same basis on which they were previously added without seriously diminishing an institution's funding base. Currently, various mechanisms to soften the financial effects of sudden enrollment decline have been

added to the formulas; whether this will be sufficient as California's colleges and universities hit the peak of the enrollment decline in the mid-1980s is not yet clear.

A "Tenured-In" Faculty

One of the factors hampering the ability of an institution to respond to reductions in resources and to reallocate those resources when needed, is the extent to which the faculty is "tenured-in" and the costs associated with this phenomenon. A faculty that is largely tenured, and moving toward the upper ranks, is an expensive faculty, and one that is often overstaffed in the humanities and liberal arts areas and understaffed in the high-demand areas of business, the professions, and the high-technology programs.

Colleges and universities are trying in various ways to cope with this factor: some are increasing the proportion of non-tenure track or part-time faculty they hire; others are instituting programs that provide inducements for early retirement; still others are trying to retrain faculty from lower-demand disciplines to work successfully in the high-demand programs. The need for an institution to develop more flexibility in the area of faculty resources is clear; the ability to do so may be problematic.

Along with the tenured-in nature of the faculty, come increases in the associated costs: more faculty higher on the ladder mean more money in salaries, and inflation forces demands from the faculty that their salaries and benefits at least keep pace with the rise in the cost of living. Faculty salaries and employee benefits will continue to represent a major portion of the institutional budget, and to be one of the major economic factors affecting the internal institutional environment.

Combined with enrollment-driven funding formulas, and reductions in real resources, the costs associated with an increasingly tenured-in faculty could have the effect of seriously diminishing the resources available to maintain and enhance program quality, to start new programs in high-demand areas, and to develop new services to meet the needs of the changing student clientele. Methods of moderating the influence of these internal economic factors need to be found and implemented in order to maintain a strong postsecondary education system for California in the years ahead.

Collective Bargaining

Faculty collective bargaining, authorized for the Community Colleges in 1976, and for the University and State University in 1979,

inserted a new uncertain factor into the internal environment of postsecondary institutions, with ramifications that may be profound. While many Community College faculties have organized with unions, the State University and University faculty are only now facing elections to decide on bargaining agents. The factor of collective bargaining is so new for California postsecondary education that its effects on the internal institutional environment can only be guessed at. In a recent study, Bowen and Glenny reported that: "There is concern that the distance between faculty and administration will increase under 'industrial models' of collective bargaining. Consensus and collegiality have been pursued as ideals, and, in many institutions, captured to a greater extent than is often realized. Many administrators and faculty fear discord as firm legal distinctions are drawn between 'management' and 'labor'" (1980, p. 4). The ultimate effects of collective bargaining may be negative ones on the internal institutional environment, if, as Glenny posits, collective bargaining by faculty members makes it "increasingly difficult, even if thought desirable, for higher institutions to make major changes in programs, work patterns, lengths of courses, and times to teach" (1980, p. 377).

The New Student Clientele

The nature of the new student clientele itself, once they enter the institution, becomes an internal factor in the institutional environment. The new clientele may bring with it new and different needs for services: older adult students may desire more late afternoon and evening programs and may only attend on a part-time basis; students from underprepared backgrounds will require increases in supportive services such as counseling and remediation; students with family responsibilities may increase the demand for child care facilities. The needs of the new student clienteles may necessitate changes in the internal workings of the institution, including curriculum changes, scheduling modifications and alterations in the type of supportive services offered.

At the same time that an institution is seeking to enchance its "market responsiveness" (and some will bridle at the term), the faculty may well be increasing their concerns for maintenance of program quality and traditional academic standards. The various factors may, at times, be at odds with each other. Shifting resources from one program to another to accommodate shifts in student demand may threaten the quality of the program from which resources were reallocated. The move toward more emphasis on occupationally oriented programs may threaten what many faculty feel are the basic components of a well-rounded education. The ability of an institution to admit and then meet the needs of an underprepared clientele through instituting remedial courses and programs may challenge the

institution's internal conceptions of academic standards and maintenance of quality. All of these factors will interact in various ways in the internal environment of an institution, and how that institution responds to these factors will depend, to a great extent, upon its particular mission, scope, and role in the postsecondary education system.

Centralization of Authority

One final factor that operates both within the internal environment of an institution and within the system of postsecondary education itself, is that of the pressure for increased centralization of authority and management. At the institutional level, as resources are constrained and difficult decisions must be made regarding where those resources ought to go, those decisions will increasingly be made at higher and higher levels. At the institutional level, those decisions may increasingly be made by the administration acting alone; at the system level, more and more decisions may be made by the systemwide administration, as concerns for the maintenance of program diversity and academic quality move beyond the individual campus to the systemwide level. At the statewide level, an increasing number of decisions regarding the appropriate distribution of programs and the equitable allocation of resources may need to be made by a coordinating body with a statewide, rather than system or campus perspective. In their 1979 study, Bowen and Glenny discussed the difficulty with centralization as a concept and the reasons why it might be expected as a response to stress:

> There is . . . widespread recognition that no simple solution such as decentralization or centralization exists for . . . a complex problem--that the most productive way to deal with the problem is through careful analysis of the various functions to be performed and assigning these at the level at which they can be most effectively achieved (1979, p. 43).

The authors conclude with the observation that:

> Centralization is a pejorative term in higher education. The greater the distance between departmental faculty and a decision relating to their program, the less likely that the decision will be informed by intimate knowledge of program needs. On the other hand, there is greater likelihood that the decision will be informed by the needs of other programs and by institutionwide priorities . . . . If a decision must be centralized, procedures and criteria should, we suggest, be set out as clearly and openly as possible (1979, p. 44).

The interactions of the various internal factors discussed above on an institution, and on the postsecondary system at large, will force a reexamination of institutional and systemwide priorities as the postsecondary education system responds to the needs of new students and new conditions.

IN CONCLUSION

Clearly, the environment for California postsecondary education in the 1980s is dramatically different from what it was in the sixties or seventies. The external demographic, economic, and socio-political factors are eliciting changes in the institutions: changes to respond to differences in the age, sex, ethnicity, and preparation of students; to shifts in student program choices and to labor market demands; to high inflation rates, increased energy costs, constrained resources, and an erratic fiscal environment; to increased legislative involvement, demands for accountability, and desires for social justice. The internal factors are also eliciting changes, while posing complex questions regarding the appropriate response of the postsecondary system: whether and how to alter enrollment-driven funding formulas; how to handle increasing plant and maintenance costs; how to maintain faculty compensation and benefits in the face of resource reductions; how to reallocate resources among competing priorities; how to respond to the needs of a new and quite different student clientele while maintaining traditional academic standards and high program quality; and finally, how to decide which decisions are best made at the systemwide rather than the campus level, and which may need to be made at a statewide rather than system level. The ultimate resolution of all of these concerns will require a reevaluation of institutional, systemwide, and statewide priorities, and a more cooperative approach to leadership than has been the case in recent years. The extent to which California's postsecondary education system can cope successfully with the increasingly complex and often negative factors in the environment of the eighties, may well depend upon new approaches to the planning and coordination of all sectors of the system. To assist in this endeavor, the Commission offers its recommendations for change in the companion document, The Challenges Ahead: A Planning Agenda for California Postsecondary Education, 1982-1987.

REFERENCES

Academy for Educational Development. Financing Postsecondary Education in California. Sacramento: Joint Committee on the Master Plan for Higher Education, California Legislature, 1973.

Adamany, David. State Government Regulation of Higher Education in California. A Report Prepared for the Sloan Commission on Government and Higher Education, December 1978.

Adams, Walter. "Economic Problems Confronting Higher Education: Financing Public Higher Education." Journal of the American Economic Association, 67:1 (February 1977) 86-89.

"Aid to Students at Private Colleges Raised by 20 States, Survey Finds." The Chronicle of Higher Education, 22:23 (July 27, 1981), pp. 1, 9.

American Association of University Women. But We Will Persist: A Comparative Research Report on the Status of Women in Academe. Washington, D.C.: The Association, 1978.

Angell, George W. "Knowing the Scope of Bargaining," in George W. Angell, Edward P. Kelley, and Associates. Handbook of Faculty Bargaining: Asserting Administrative Leadership for Institutional Progress by Preparing for Bargaining, Negotiating and Administering Contracts, and Improving the Bargaining Process, pp. 126-139. San Francisco: Jossey-Bass, 1977.

---. "Management Prerogatives and Faculty Rights," Journal of Higher Education 49:3 (May/June 1978), 283-293.

Balderston, Frederick E. "Financing California's System of Postsecondary Education" in Neil J. Smelser and Gabriel Almond, eds., Public Higher Education in California, pp. 143-159. Berkeley and Los Angeles: University of California Press, 1974.

Balderston, Frederick E.; and Weathersby, George B. PPBS in Higher Education Planning and Management: From PPBS to Policy Analysis. Berkeley: Ford Foundation Program for Research in University Administration, University of California, 1972.

Baldridge, J. Victor; and Adams, Barbara. "The Shakeup in California Higher Education," AAHE Bulletin, 31:10 (June 1979) 1-9.

Begin, James P. "Statutory Definitions of the Scope of Negotiations: The Implications for Traditional Faculty Governancy," Journal of Higher Education, 49:3 (May/June 1978) 247-260.

Birnbaum, Robert. "Unionization and Faculty Compensation," Educational Record, 55:1 (Winter 1974) 29-33; "Unionization and Faculty Compensation, Part II," Educational Record, 57:2 (Spring 1976) 116-118.

Board of Governors, California Community Colleges. Long-Term Finance Plan: Recommendations for the 1980s. Sacramento: California Community Colleges, 1979.

Bogetich, Thomas (Executive Director, California Advisory Council on Vocational Education). Letter to Kenneth O'Brien (Associate Director, California Postsecondary Education Commission), October 4, 1979.

Boulding, Kenneth E. "The Management of Decline," AGB Reports. 17 (1975) 4-8.

Bowen, Frank M.; and Glenny, Lyman A. Uncertainty in Public Higher Education: Responses to Stress at Ten California Colleges and Universities. A Report to the California Postsecondary Education Commission. Sacramento: California Postsecondary Education Commission, 1980.

---. Quality and Accountability: An Evaluation of Statewide Program Review Procedures. A Report to the California Postsecondary Education Commission. Sacramento: California Postsecondary Education Commission, 1981.

Bowen, Howard R. The Costs of Higher Education: How Much Do Colleges and Universities Spend and How Much Should They Spend? San Francisco: Jossey-Bass, 1980.

Brantley, Paul S.; Miller, Charles S.; and McAlpine, Thomas. "To Be or Not to Be--Survival Profiles of Emerging Institutions," in Alfred L. Cooke, ed., New Directions for Institutional Research 24: Planning Rational Retrenchment, pp. 11-27. San Francisco: Jossey-Bass, 1979.

California Advisory Council on Vocational Education. "What is the Advisory Council?" Sacramento: The Council, 1979.

California Community Colleges. "Integrating and Implementing Policy Decisions." A Staff presentation to the Board of Governors, December 6-7, 1979a.

---. A Survey of California Public Attitudes Toward the California Community Colleges. Sacramento: California Community Colleges, 1979b.

California Coordinating Council for Higher Education. The Development of the State's Programming and Budgeting System in California Public Higher Education. Report 68-16. Sacramento: The Council, 1968.

California Postsecondary Education Commission. Planning for Postsecondary Education in California: A Five Year Plan, 1976-81. Commission Report 75-4. Sacramento: The Commission, 1975.

---. Through The Open Door: A Study of Patterns of Enrollment and Performance in California's Community Colleges. Commission Report 76-1. Sacramento: The Commission, 1976.

---. Equal Educational Opportunity in California Postsecondary Education, Part II. Commission Report 77-4. Sacramento: The Commission, 1977.

---. "Annual Summary of Program Review Activities, 1977-78," Adopted December 11, 1978a.

---. Formal Education and Training Programs Sponsored in California by Business, Industry, Government, and the Military. Commission Report 78-17. Sacramento: The Commission, 1978b.

---. State Policy Toward Independent Postsecondary Institutions. Commission Report 78-3. Sacramento: The Commission, 1978c.

---. "Annual Summary of Program Review Activities, 1978-79," Adopted March 17, 1980. Sacramento: The Commission, 1980a.

---. Budget Formulas for Declining Enrollments. Sacramento: The Commission, 1980b.

---. Determining the Cost of Instruction in California Public Higher Education: A Feasibility Study of Alternative Methods. Commission Report 80-12B. Sacramento: The Commission, 1980c.

---. Equal Educational Opportunity in California Postsecondary Education, Part III. Commission Report 80-6. Sacramento: The Commission, 1980d.

---. "Progress Report on Program Review Activities." Staff Report reviewed October 20, 1980e.

---. College-Going Rates in California, 1979 Update: A Summary and Appendices. Commission Report 81-3. Sacramento: The Commission, 1981a.

---. Director's Report, January 1981: Surveying the Seventies. Commission Report 81-1B. Sacramento: The Commission, 1981b.

---. Information Digest. Sacramento: The Commission, 1981c.

---. Women and Minorities in California Public Postsecondary Education: Their Employment, Classification, and Compensation, 1977-1979. Commission Report 81-7. Sacramento: The Commission, 1981d.

California State Controller. 1978-79 Annual Report, Financial Transactions Concerning School Districts of California. Sacramento: California State Controller, 1980.

California State Department of Education. Guide to California Private Postsecondary Career Education. Sacramento: The Department, 1980.

California State Department of Finance. California Student Aid Programs: An Analysis of Program Features. Sacramento: The Department, 1978.

California State University and Colleges. Academic Program and Resource Planning in the California State University and Colleges. Long Beach: Office of the Chancellor, California State University and Colleges, 1980.

California Tax Reform Association. Tax Back Talk, 4:10 (November 1980).

Callan, Patrick M. "Planning and Coordinating California Postsecondary Education: Hopes and Expectations." Statement to the California Postsecondary Education Commission, Sacramento, January 21, 1974.

---. "Evaluating Planning by Statewide Boards," in Robert O. Berdah., ed., New Directions for Institutional Research 5: Evaluating Statewide Boards, pp. 15-25. San Francisco: Jossey-Bass, 1975.

---. "A State Higher Education Agency View of Planning and Review of Graduate Education." Boulder: Western Interstate Commission for Higher Education, 1979.

Carnegie Council on Policy Sudies in Higher Education. Three Thousand Futures: The Next Twenty Years for Higher Education. San Francisco: Jossey-Bass, 1980.

Cheit, Earl F. The New Depression in Higher Education: A Sudy of Financial Conditions at 41 Colleges and Universities. New York: McGraw-Hill, 1971.

Commission on State Finance. Staff Report on General Fund Reserves and Expenditures, 1980-81 and 1981-82 Fiscal Years. Sacramento: The Commission, 1981.

Cooke, Alfred L., ed. New Directions for Institutional Research 24: Planning Rational Retrenchment. San Francisco: Jossey-Bass, 1979.

Del Buono, Xavier (Associate Superintendent for Adult and Community Education, State Department of Education). Letter and enclosure to Kenneth B. O'Brien (Associate Director, California Postsecondary Education Commission), Decembe. 6, 1979.

Division of Agricultural Sciences, University of California Berkeley. Local School Revenues and Expenditures in California. Berkeley: The Division, 1980.

Education Commission of the States. Policy on Coordination and Governance of Postsecondary Education in the 1980s. Denver: The Commission, 1979.

---. Tax and Expenditure Referenda: An Analysis of Public Opinion, Voting Behavior, and Campaigns in Four States. Denver: The Commission, 1980.

"Education: Impacts on Faculty Salary, Compensation, and Promotions," Economic Inquiry, 15 (July 1977) 385-396.

Ernst, Richard J.; and McFarlane, Larry A. "Are We Shortchanging Our Students by Using Part-Time Faculty?" in David W. Leslie, ed., New Directions for Institutional Research 18: Employing Part-Time Faculty, pp. 90-92. San Francisco: Jossey-Bass, 1978.

Evans, Jerry. Living With Topsy: Twenty-Five Years of State Budget Growth in California. Sacramento: Public Affairs Research Group, 1976.

Frances, Carol. The Short-Run Outlook For Higher Education. Washington, D.C.: American Council on Education, 1980.

Freeman, Jack E. "Comprehensive Planning in Higher Education," in John D. Millett, ed., New Directions for Higher Education 19: Managing Turbulance and Change, pp. 33-52. San Francisco: Jossey-Bass, 1977.

Gappa, Judith M.; and Uhling, Barbara S. Women in Academe: Steps to Greater Equality. AAHE-ERIC/Higher Education Research Report No. 1, 1979. Washington, D.C.: American Association for Higher Education, 1979.

Gerth, Donald. "Planning Assumptions and Missions and Goals Statements." Paper delivered to the Annual Academic Retreat of the California State University and Colleges, Asilomar, California, November 2-4, 1979.

Gladieux, Lawrence E.; and others. Federal Support of Higher Education and Implications for the States. Washington, D.C.: Washington Office, College Entrance Examination Board, 1980.

Glenny, Lyman A. "Financing Higher Education in the 1980s: Fewer Students, More Dollars?" Higher Education Perspectives '78: Proceedings of the 27th Annual SREB Legislative Work Conference. Atlanta: Southern Regional Education Board, 1978.

---. "Demographic and Related Issues for Higher Education in the 1980s," Journal of Higher Education, 51:4 (July/August 1980) 363-380.

Graves, Mary Ann. "Financing California Government in the 1980s." October 20, 1980.

Halstead, D. Kent. Higher Education Prices and Price Indexes. Washington, D.C.: U.S. Government Printing Office, 1975; Supplement, 1978.

---. Statewide Planning in Higher Education. Washington, D.C.: U.S. Government Printing Office, 1979.

"High Court Hears Arguments in Yeshiva Case tha May Shape the Future of Faculty Bargaining," The Chronicle of Higher Education, 14:7 (October 15, 1979), 1,12; "High Court Calls Yeshiva Faculty Mangers, Not Subject to National Labor Relations Act,: The Chronicle of Higher Education, 14:23 (February 25, 1980), 1,7.

Hitch, Charles. "Testimony to the Select Committee on the Master Plan, December 21, 1971," quoted by Frederick E. Balderston, "Financing California's System of Postsecondary Education," in Neil J. Smelser and Gabriel Almond, eds., Public Higher Education in California. Berkeley and Los Angeles: University of California Press, 1974.

Jamison, Conrad C. California Tax Study: An Analysis of Revenues and Expenditures of State and Local Government in California. Los Angeles: Security Pacific National Bank, 1981.

Jenny, Hans. Hang-Gliding, or Looking for an Updraft: A Study of College and University Finance During the 1980s. Wooster, Ohio: The College of Wooster, 1980.

Jenny, Hans; Heim, Peggy; and Hughes, Geoff. Another Challenge: Age 70 Retirement in Higher Education. New York: Teachers Insurance and Annuity Association, 1979.

Joint Committee on the Master Plan for Higher Education, California Legislature. Report of the Joint Committee on the Master Plan for Higher Education. Sacramento: California Legislature, 1973.

Kellams, Samuel E.; and Kyre, Kenneth K. "Part-Time Faculty in Four-Year Colleges and Universities," in David W. Leslie, ed., New Directions for Institutional Research 18: Employing Part-Time Faculty, pp. 17-40, San Francisco: Jossey-Bass, 1978.

Kimball, Larry L.; and Jaquette, Peter. "The UCLA Forecast for California," UCLA Business Forecast for the Nation and California in 1981. Los Angeles: University of California, Los Angeles, 1980.

Kintzer, Frederick C. Proposition 13: Implications for Community Colleges. Topical Paper 72. Los Angeles: ERIC Clearinghouse for Junior Colleges, University of California, Los Angeles, 1980.

Kirschling, Wayne R., ed. New Directions for Institutional Research 20: Evaluating Faculty Performance and Vitality. San Francisco: Jossey-Bass, 1978.

Knudsen, Larry. "Small Colleges Face a Money Squeeze," California Business, 15:9 (September 1980) 98.

Kost, Robert J. "Industry," in Philip E. Frandson, ed., Power and Conflict in Continuing Education, pp. 38-60. Los Angeles: Wadsworth, 1980.

Kramer, Martin. The Venture Capital of Higher Education: The Private and Public Sources of Discretionary Funds. Berkeley: Carnegie Council on Policy Studies in Higher Education, 1980.

Ladd, Everett Carll, Jr; and Lipset, Seymour Martin. Professors, Unions, and American Higher Education. Berkeley: The Carnegie Commission on Higher Education, 1973.

---. "The Faculty Mood: Pessimism is Predominant," The Chronicle of Higher Education, October 3, 1977.

Lee, Barbara A. "Governance at Unionized Four-Year Colleges: Effect on Decision-Making Structures," Journal of Higher Education, 50:5 (September/October 1979) 565-585.

Lee, Eugene C.; and Bowen, Frank M. Managing Multicampus Systems: Effective Administration in an Unsteady State. A Report for the Carnegie Council on Policy Studies in Higher Education. San Francisco: Jossey-Bass, 1975.

Leslie, Larry L. "Cost Data: Reduction or Intensification of Uncertainty?" Draft chapter for a forthcoming publication on higher education, December 1980.

Leslie, Larry L.; and Hu, Teh-Wei. "The Financial Implications of Collective Bargaining, Journal of Educational Finance, 3:1 (Summer 1977) 32-55.

Leslie, Larry L.; and Miller, Howard F., Jr. Higher Education and the Steady State. AAHE-ERIC/Higher Education Research Report No. 4, 1974. Washington, D.C.: American Association for Higher Education.

Liaison Committee of the State Board of Education and the Regents of the University of California. A Master Plan for Higher Education in California, 1960-1975. Sacramento: California State Department of Education, 1960.

Loeb, Jane W.; Ferber, Marianne A.; and Lowery, Helen M. "The Effectiveness of Affirmative Action for Women," Journal of Higher Education, 49:3 (May/June 1978) 218-230.

Maeroff, Gene I. "The Growing Breed of Part-Time Professors," World, March 16, 1980, 25.

Malott, R. H. "Corporate Support of Education: Some Strings Attached," Harvard Business Review, 56:4 (July/August 1978) 212-220.

Marshall, Joan L. "The Effects of Collective Bargaining on Faculty Salaries in Higher Education," Journal of Higher Education, 50:3 (May/June 1979) 310-322.

Meisinger, Richard J. State Budgeting for Higher Education: The Uses of Formulas. Berkeley: Center for Research and Development in Higher Education, University of California, Berkeley, 1976.

Millard, Richard. "The States and Issues of the Eighties." Statement to the California Postsecondary Education Commission, Santa Barbara, November 18, 1979.

Millett, John D. Financing Current Operations of American Higher Education. Washington, D.C.: Academy for Educational Development, 1972.

---. Challenges in Statewide Planning for the 1980's. Academy for Educational Development Occasional Paper Number Nine. New York and Washington: Academy for Educational Development, 1979.

Morgan, David R.; and Kearney, Richard C. "Collective Bargaining and Faculty Compensation: A Comparative Analysis," Sociology of Education, 50 (January 1977) 28-39.

Mortimer, Kenneth P.; and McConnell, T. R. Sharing Authority Effectively: Participation, Interaction, and Discretion. San Francisco: Jossey-Bass, 1978.

Mortimer, Kenneth P.; and Tierney, Michael L. The Three "R's" of the Eighties: Reduction, Reallocation, and Retrenchment. AAHE-ERIC/Higher Education Research Report No. 4, 1979. Washington, D.C.: American Association for Higher Education, 1979.

National Association of College and University Business Officers. Costing for Policy Analysis. Washington, D.C.: The Association, 1980.

National Center for Education Statistics. Financial Statistics of Institutions of Higher Education: Current Funds, Revenues, and Expenditures, 1969-70. Washington, D.C.: U.S. Government Printing Office, 1973.

---. Financial Statistics of Institutions of Higher Education, Fiscal Year 1979. Washington, D.C.: U.S. Government Printing Office, 1981a.

---. The Condition of Education, 1981 Edition. Washington, D.C.: U.S. Government Printing Office, 1981b.

Nelson, Susan C. The Equity of Public Subsidies for Higher Education: Some Thoughts on the Literature. Papers in Education Finance No. 5. Denver: Education Commission of the States, 1978.

Nwagbaraocha, Joel O. "Planning, Management, and Evaluation: In Search of a Viable System for College Improvement," in Alfred L. Cooke, ed., New Directions for Institutional Research 24: Planning Rational Retrenchment, pp. 29-43. San Francisco: Jossey-Bass, 1979.

Odell, Morgan; and Thelin, John R. Keeping Pace: Trends in Federal and State Financial Aid for Students in California's Independent Colleges and Universities, 1975-76 to 1980-81. Santa Ana: Association of Independent California Colleges and Universities, 1980.

Office of the Legislative Analyst. Analysis of the 1979-80 Budget Bill. Sacramento: Office of the Legislative Analyst, 1979.

---. Analysis of the 1980-81 Budget Bill. Sacramento: Office of the Legislative Analyst, 1980a.

---. "The Impact of Inflation on State Budget Growth," November 17, 1980b.

---. Analysis of the 1981-82 Budget Bill. Sacramento: Office of the Legislative Analyst, 1981a.

---. "A Review of the AB 8 Deflator and Proposition 4." Statement to the Senate Finance Committee, California Legislature, February 12, 1981b.

"Part-Time Professors on the Increase," The Chronicle of Higher Education, 15:18 (January 16, 1978) 1, 6.

Patton, Carl V. "Mid-Career Change and Early Retirement," in Wayne R. Kirschling, ed., New Directions for Institutional Research 20: Evaluating Faculty Performance and Vitality, pp. 69-82. San Francisco: Jossey-Bass, 1978.

Rand Corporation. The Equity Effects of Restraints on Taxes and Spending. Rand Paper Series No. P-6469. Santa Monica: Rand Corporation, 1980.

Rodriquez, Richard. "Beyond the Minority Myth," Change, 10:8 (September 1978) 28-34.

Rourke, Francis E.; and Brooks, Glenn E. The Management Revolution in Higher Education. Baltimore: Johns Hopkins, 1966.

Select Committee on the Master Plan for Higher Education. The California Master Plan for Higher Education in the Seventies and Beyond: A Report and Recommendations to the Coordinating Council for Higher Education. Coordinating Council Report 72-6. Sacramento: California Coordinating Council for Higher Education, 1972.

Shulman, Carol Herrnstadt. Old Expectations, New Realities: The Academic Profession Revisited. AAHE-ERIC/Higher Education Research Report No. 2, 1979. Washington, D.C.: American Association for Higher Education, 1979.

Sloan Commission on Government and Higher Education. A Program for Renewed Partnership. Cambridge, Mass.: Ballinger, 1980.

Speich, Don F.; and Weiner, Stephen S. In the Eye of the Storm: Proposition 13 and Public Education in California. Washington, D.C.: Institute for Educational Leadership, George Washington University, 1980.

Stampen, Jacob. The Financing of Public Higher Education. AAHE-ERIC/Higher Education Research Report No. 9, 1980. Washington, D.C.: American Association for Higher Education, 1980.

Steiner, Barry N. "The Impact of Collective Bargaining Upon Those Who Govern Higher Education--I," in Aaron Levenstein, ed., The Uniqueness of Collective Bargaining in Higher Education. Proceedings, Sixth Annual Conference, National Center for Collective Bargaining in Higher Education. New York: National Center for the Study of Collective Bargaining in Higher Education, Baruch College, City University of New York, 1978.

Thelin, John R. (Assistant Director, Association of Independent California Colleges and Universities). Letter and attachment to Kenneth B. O'Brien (Associate Director, California Postsecondary Education Commission), October 2, 1979.

Trow, Martin. "The Public and Private Lives of Higher Education." Daedalus, 104:1 (Winter 1975) 113-127.

University of California. The University of California: A Multi-Campus System in the 1980s. Report of the Joint Planning Committee. Berkeley: University of California, 1979.

---. Report of the Task Group on Factors Affecting Student Choice. Berkeley: Office of the Academic Vice President, University of California, 1980.

---. University of California Planning Statement, Part I: General Campus Academic Issues for the Eighties. Berkeley: University of California, 1981.

Van Alstyne, William W. "Tenure and Collective Bargaining" in G. Kerry Smith, ed., New Teaching, New Learning: Current Issues in Higher Education, 1971, pp. 210-217. San Francisco: Jossey-Bass, 1971.

Wasserman, Elga, ed. Women in Academia: Evolving Policies Toward Equal Opportunities. New York: Praeger, 1975.

Wildavsky, Aaron. The Politics of the Budget Process. Boston: Little-Brown, 1974.

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